A Complete Bibliography of Publications in *SIAM slash ASA Journal on Uncertainty Quantification*

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References

Abdulle:2018:OES

[AAV18] Assyr Abdulle, Ibrahim Almuslimani, and Gilles Vilmart. Optimal explicit stabilized integrator of weak order 1 for stiff and ergodic stochastic differential equations. *SIAM/ASA Journal on Uncertainty Quantification*, 6(2):937–964, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Azzimonti:2016:QUE

[ABCG16] Dario Azzimonti, Julien Bect, Clément Chevalier, and David Ginsbourger. Quantifying uncertainties on excursion sets under a Gaussian random field prior. *SIAM/ASA Journal on Uncertainty Quantification*, 4 (1):850–874, ???? 2016. CODEN SJUQA3. ISSN 2166-2525.

Adcock:2018:CSS

[ABJN18] Ben Adcock, Anyi Bao, John D. Jakeman, and Akil Narayan. Compressed sensing with sparse corruptions: Fault-tolerant sparse collocation approximations. *SIAM/ASA Journal on Uncertainty Quantification*, 6 (4):1424–1453, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Altmeyer:2022:PES

[ABJR22] Randolf Altmeyer, Till Bretschneider, Josef Janák, and Markus Reiß. Parameter estimation in an SPDE model for cell repolarization. *SIAM/ASA Journal on Uncertainty Quantification*, 10(1):179–199, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/20M1373347`.

Agapiou:2014:AGS

[ABPS14] Sergios Agapiou, Johnathan M. Bardsley, Omiros Papaspiliopoulos, and Andrew M. Stuart. Analysis of the Gibbs sampler for hierarchical inverse problems. *SIAM/ASA Journal on Uncertainty Quantification*, 2 (1):511–544, ???? 2014. CODEN SJUQA3. ISSN 2166-2525.

Atar:2015:RBR

[ACD15] Rami Atar, Kenny Chowdhary, and Paul Dupuis. Robust bounds on risk-sensitive functionals via Rényi divergence. *SIAM/ASA Journal on Uncertainty Quantification*, 3(1):18–33, ???? 2015. CODEN SJUQA3. ISSN 2166-2525.

Abdulle:2020:BNH

[AD20] Assyr Abdulle and Andrea Di Blasio. A Bayesian numerical homogenization method for elliptic multiscale inverse problems. *SIAM/ASA Journal on Uncertainty Quantification*, 8 (1):414–450, ???? 2020. CODEN SJUQA3. ISSN 2166-2525.

Adelmann:2019:NUQ

[Ade19] Andreas Adelmann. On nonintrusive uncertainty quantification and surrogate model construction in particle accelerator modeling. *SIAM/ASA Journal on Uncertainty Quantification*, 7(2):383–416, ???? 2019. CODEN SJUQA3. ISSN 2166-2525.

An:2025:SGA

[ADF+25] Xin An, Josef Dick, Michael Feischl, Andrea Scaglioni, and Thanh Tran. Sparse grid approximation of nonlinear SPDEs: The Landau–Lifshitz–Gilbert equation. *SIAM/ ASA Journal on Uncertainty Quantification*, 13(2):472–517, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/24M1646054`.

Afkham:2023:UQI

[ADH23] Babak Maboudi Afkham, Yiqiu Dong, and Per Christian Hansen. Uncertainty quantification of inclusion boundaries in the context of X-ray tomography. *SIAM/ASA Journal on Uncertainty Quantification*, 11(1):31–61, ???? 2023. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/21M1433782`.

Akyildiz:2022:SFE

[ADSG22] Ömer Deniz Akyildiz, Connor Duffin, Sotirios Sabanis, and Mark Girolami. Statistical finite elements via Langevin dynamics. *SIAM/ASA Journal on Uncertainty Quantification*, 10(4):1560–1585, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/21M1463094`.

Arbogast:2015:PEE

[AEST15] T. Arbogast, D. Estep, B. Sheehan, and S. Tavener. A posteriori error estimates for mixed finite element and finite volume methods for parabolic problems coupled through a boundary. *SIAM/ASA Journal on Uncertainty Quantification*, 3(1):169–198, ???? 2015. CODEN SJUQA3. ISSN 2166-2525.

Ayi:2019:AAP

[AF19] Nathalie Ayi and Erwan Faou. Analysis of an asymptotic preserving scheme for stochastic linear kinetic equations in the diffusion limit. *SIAM/ASA Journal on Uncertainty Quantification*, 7(2):760–785, ???? 2019. CODEN SJUQA3. ISSN 2166-2525.

Al-Ghattas:2024:EKF

[AGBSA24] Omar Al-Ghattas, Jiajun Bao, and Daniel Sanz-Alonso. Ensemble Kalman filters with resampling. *SIAM/ASA Journal on Uncertainty Quantification*, 12(2):411–441, May 2024. CODEN SJUQA3. ISSN 2166-2525.

Allen:2023:EFH

[AGZ23] Sam Allen, David Ginsbourger, and Johanna Ziegel. Evaluating forecasts for high-impact events using transformed kernel scores. *SIAM/ASA Journal on Uncertainty Quantification*, 11(3):906–940, ???? 2023. CODEN SJUQA3.

ISSN 2166-2525. URL https://epubs.siam.org/doi/10.1137/22M1532184.

Aufiero:2025:SBG

[AJ25] Massimo Aufiero and Lucas Janson. Surrogate-based global sensitivity analysis with statistical guarantees via Floodgate. *SIAM/ASA Journal on Uncertainty Quantification*, 13(2):563–590, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL https://epubs.siam.org/doi/10.1137/24M1718330.

Aylwin:2020:DUQ

[AJHSZ20] Ruben Aylwin, Carlos Jerez-Hanckes, Christoph Schwab, and Jakob Zech. Domain uncertainty quantification in computational electromagnetics. *SIAM/ASA Journal on Uncertainty Quantification*, 8(1):301–341, ???? 2020. CODEN SJUQA3. ISSN 2166-2525.

Audouze:2023:RLS

[AKB+23] Christophe Audouze, Aaron Klein, Adrian Butscher, Nigel Morris, Prasanth Nair, and Masayuki Yano. Robust level-set-based topology optimization under uncertainties using anchored ANOVA Petrov–Galerkin method. *SIAM/ASA Journal on Uncertainty Quantification*, 11(3):877–905, ???? 2023. CODEN SJUQA3. ISSN 2166-2525. URL https://epubs.siam.org/doi/10.1137/22M1524722.

Agrawal:2022:VIA

[AKSAS22] Shiv Agrawal, Hwanwoo Kim, Danie Sanz-Alonso, and Alexander Strang. A variational inference approach to inverse problems with gamma hyperpriors. *SIAM/ASA Journal on Uncertainty Quantification*, 10(4):1533–1559, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL https://epubs.siam.org/doi/10.1137/21M146209X.

Attia:2025:ROE

[ALM25] Ahmed Attia, Sven Leyffer, and Todd S. Munson. Robust a-optimal experimental design for sensor placement in Bayesian linear inverse problems. *SIAM/ASA Journal on Uncertainty Quantification*, 13(2):744–774, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL https://epubs.siam.org/doi/10.1137/24M1667543.

Andrianakis:2017:EHM

[AMV+17] Ioannis Andrianakis, Nicky McCreesh, Ian Vernon, Trevelyan J. McKinley, Jeremy E. Oakley, Rebecca N. Nsubuga, Michael Goldstein, and Richard G. White. Efficient history matching of a high dimensional individual-based HIV transmission model. *SIAM/ASA Journal on Uncertainty Quantification*, 5(1):694–719, ???? 2017. CODEN SJUQA3. ISSN 2166-2525.

Azzimonti:2014:MFE

[ANSS14] Laura Azzimonti, Fabio Nobile, Laura M. Sangalli, and Piercesare Secchi. Mixed finite elements for spatial regression with PDE penalization. *SIAM/ASA Journal on Uncertainty Quantification*, 2(1):305–335, ???? 2014. CODEN SJUQA3. ISSN 2166-2525.

Alsup:2023:CAS

[AP23] Terrence Alsup and Benjamin Peherstorfer. Context-aware surrogate modeling for balancing approximation and sampling costs in multifidelity importance sampling and Bayesian inverse problems. *SIAM/ASA Journal on Uncertainty Quantification*, 11(1):285–319, ???? 2023. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/21M1445594`.

Alexanderian:2017:MVR

[APSG17] Alen Alexanderian, Noemi Petra, Georg Stadler, and Omar Ghattas. Mean-variance risk-averse optimal control of systems governed by PDEs with random parameter fields using quadratic approximations. *SIAM/ASA Journal on Uncertainty Quantification*, 5(1):1166–1192, ???? 2017. CODEN SJUQA3. ISSN 2166-2525.

Alexanderian:2021:ODL

[APSS21] Alen Alexanderian, Noemi Petra, Georg Stadler, and Isaac Sunseri. Optimal design of large-scale Bayesian linear inverse problems under reducible model uncertainty: Good to know what you don't know. *SIAM/ASA Journal on Uncertainty Quantification*, 9(1):163–184, ???? 2021. CODEN SJUQA3. ISSN 2166-2525.

Abdulle:2017:SMM

[APV17] A. Abdulle, G. A. Pavliotis, and U. Vaes. Spectral methods for multiscale stochastic differential equations. *SIAM/ASA Journal on Uncertainty Quantification*, 5(1):720–761, ???? 2017. CODEN SJUQA3. ISSN 2166-2525.

Aristoff:2019:GPR

[Ari19] David Aristoff. Generalizing parallel replica dynamics: Trajectory fragments, asynchronous computing, and PDMPs. *SIAM/ASA Journal on Uncertainty Quantification*, 7(2):685–719, ???? 2019. CODEN SJUQA3. ISSN 2166-2525.

Arbabi:2022:GSM

[AS22] Hassan Arbabi and Themistoklis Sapsis. Generative stochastic modeling of strongly nonlinear flows with non-Gaussian statistics. *SIAM/ASA Journal on Uncertainty Quantification*, 10(2):555–583, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/20M1359833`.

Arnst:2013:HSS

[ASG13] M. Arnst, C. Soize, and R. Ghanem. Hybrid sampling/spectral method for solving stochastic coupled problems. *SIAM/ASA Journal on Uncertainty Quantification*, 1 (1):218–243, ???? 2013. CODEN SJUQA3. ISSN 2166-2525.

Ali:2017:MMC

[AUH17] Ahmad Ahmad Ali, Elisabeth Ullmann, and Michael Hinze. Multilevel Monte Carlo analysis for optimal control of elliptic PDEs with random coefficients. *SIAM/ASA Journal on Uncertainty Quantification*, 5(1):466–492, ???? 2017. CODEN SJUQA3. ISSN 2166-2525.

Batselier:2025:LDS

[Bat25] Kim Batselier. Low-dimensional subspace regularization through structured tensor priors. *SIAM/ASA Journal on Uncertainty Quantification*, 13(3):1452–1474, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/24M1688497`.

Berliner:2016:FMM

[BB16] L. Mark Berliner and Jenný Brynjarsdóttir. A framework for multi-model ensembling. *SIAM/ASA Journal on Uncertainty Quantification*, 4(1): 902–923, ???? 2016. CODEN SJUQA3. ISSN 2166-2525.

Banerjee:2015:MDE

[BBB+15] Sourabh Banerjee, Ayanendranath Basu, Sourabh Bhattacharya, Smarajit Bose, Dalia Chakrabarty, and Soumendu Sundar Mukherjee. Minimum distance estimation of milky way model parameters and related inference. *SIAM/ASA Journal on Uncertainty Quantification*, 3(1):91–115, ???? 2015. CODEN SJUQA3. ISSN 2166-2525.

Broto:2022:BDC

[BBCM22] Baptiste Broto, François Bachoc, Laura Clouvel, and Jean-Marc Martinez. Block-diagonal covariance estimation and application to the Shapley effects in sensitivity analysis. *SIAM/ASA Journal on Uncertainty Quantification*, 10(1):379–403, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/20M1358839`.

Broto:2020:VRE

[BBD20] Baptiste Broto, François Bachoc, and Marine Depecker. Variance reduction for estimation of Shapley effects and adaptation to unknown input distribution. *SIAM/ASA Journal on Uncertainty Quantification*, 8(2):693–716, ???? 2020. CODEN SJUQA3. ISSN 2166-2525.

Broto:2021:GLA

[BBDM21] Baptiste Broto, François Bachoc, Marine Depecker, and

Jean-Marc Martinez. Gaussian linear approximation for the estimation of the Shapley effects. *SIAM/ASA Journal on Uncertainty Quantification*, 9 (3):1132–1151, ???? 2021. CODEN SJUQA3. ISSN 2166-2525.

BenSalem:2019:GPB

[BBR+19] Malek Ben Salem, François Bachoc, Olivier Roustant, Fabrice Gamboa, and Lionel Tomaso. Gaussian process-based dimension reduction for goal-oriented sequential design. *SIAM/ASA Journal on Uncertainty Quantification*, 7(4):1369–1397, ???? 2019. CODEN SJUQA3. ISSN 2166-2525.

Bardsley:2021:OBM

[BC21] Johnathan M. Bardsley and Tiangang Cui. Optimization-based Markov chain Monte Carlo methods for nonlinear hierarchical statistical inverse problems. *SIAM/ASA Journal on Uncertainty Quantification*, 9(1):29–64, ???? 2021. CODEN SJUQA3. ISSN 2166-2525.

Brehier:2022:SRC

[BC22] Charles-Edouard Bréhier and David Cohen. Strong rates of convergence of a splitting scheme for Schrödinger equations with nonlocal interaction cubic nonlinearity and white noise dispersion. *SIAM/ASA Journal on Uncertainty Quantification*, 10(1):453–480, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/20M1378168`.

Binev:2017:DAR

[BCD+17] Peter Binev, Albert Cohen, Wolfgang Dahmen, Ronald DeVore, Guergana Petrova, and Przemyslaw Wojtaszczyk. Data assimilation in reduced modeling. *SIAM/ASA Journal on Uncertainty Quantification*, 5 (1):1–29, ???? 2017. CODEN SJUQA3. ISSN 2166-2525.

Banks:2015:APP

[BCH15] H. T. Banks, Jared Catenacci, and Shuhua Hu. Asymptotic properties of probability measure estimators in a nonparametric model. *SIAM/ASA Journal on Uncertainty Quantification*, 3(1):417–433, ???? 2015. CODEN SJUQA3. ISSN 2166-2525.

Bhatnagar:2022:CMC

[BCKW22] Saumya Bhatnagar, Won Chang, Seonjin Kim, and Jiali Wang. Computer model calibration with time series data using deep learning and quantile regression. *SIAM/ASA Journal on Uncertainty Quantification*, 10(1):1–26, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/20M1382581`.

Bao:2016:IRS

[BCL16] Gang Bao, Chuchu Chen, and Peijun Li. Inverse random source scattering problems in several dimensions. *SIAM/ASA Journal on Uncertainty Quantification*, 4(1):1263–1287, ???? 2016. CODEN SJUQA3. ISSN 2166-2525.

Binev:2018:GAO

[BCMN18] Peter Binev, Albert Cohen, Olga Mula, and James Nichols. Greedy algorithms for optimal measurements selection in state estimation using reduced models. *SIAM/ASA Journal on Uncertainty Quantification*, 6(3): 1101–1126, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Bao:2016:FOS

[BCMZ16] Feng Bao, Yanzhao Cao, Amnon Meir, and Weidong Zhao. A first order scheme for backward doubly stochastic differential equations. *SIAM/ASA Journal on Uncertainty Quantification*, 4(1):413–445, ???? 2016. CODEN SJUQA3. ISSN 2166-2525.

Bao:2014:HSG

[BCWZ14] Feng Bao, Yanzhao Cao, Clayton Webster, and Guannan Zhang. A hybrid sparse-grid approach for nonlinear filtering problems based on adaptive-domain of the Zakai equation approximations. *SIAM/ASA Journal on Uncertainty Quantification*, 2(1):784–804, ???? 2014. CODEN SJUQA3. ISSN 2166-2525.

Bishop:2023:RKB

[BD23] Adrian N. Bishop and Pierre Del Moral. Robust Kalman and Bayesian set-valued filtering and model validation for linear stochastic systems. *SIAM/ASA Journal on Uncertainty Quantification*, 11(2):389–425, ???? 2023. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/22M1481270`.

Bergou:2022:SLM

[BDKR22] El Houcine Bergou, Youssef Diouane, Vyacheslav Kungurtsev, and Clément W. Royer. A stochastic Levenberg–Marquardt method using random models with complexity results. *SIAM/ASA Journal on Uncertainty Quantification*, 10(1):507–536, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/20M1366253`.

Butler:2013:PUU

[BDW13] T. Butler, C. Dawson, and T. Wildey. Propagation of uncertainties using improved surrogate models. *SIAM/ASA Journal on Uncertainty Quantification*, 1(1):164–191, ???? 2013. CODEN SJUQA3. ISSN 2166-2525.

Berger:2013:ME

[BEG13] James Berger, Donald Estep, and Max Gunzburger. Message from the Editors. *SIAM/ASA*

Journal on Uncertainty Quantification, 1(1):1, ???? 2013. CODEN SJUQA3. ISSN 2166-2525.

Butler:2014:MTC

[BET+14] T. Butler, D. Estep, S. Tavener, C. Dawson, and J. J. Westerink. A measure-theoretic computational method for inverse sensitivity problems III: Multiple quantities of interest. *SIAM/ASA Journal on Uncertainty Quantification*, 2(1):174–202, ???? 2014. CODEN SJUQA3. ISSN 2166-2525.

Birmpa:2022:MUC

[BFKRB22] Panagiota Birmpa, Jinchao Feng, Markos A. Katsoulakis, and Luc Rey-Bellet. Model uncertainty and correctability for directed graphical models. *SIAM/ASA Journal on Uncertainty Quantification*, 10(4):1461–1512, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/21M1434453`.

Ballani:2015:HTA

[BG15] Jonas Ballani and Lars Grasedyck. Hierarchical tensor approximation of output quantities of parameter-dependent PDEs. *SIAM/ASA Journal on Uncertainty Quantification*, 3(1):852–872, ???? 2015. CODEN SJUQA3. ISSN 2166-2525.

Beck:2016:SDM

[BG16] Joakim Beck and Serge Guillas. Sequential design with Mutual Information for Computer Experiments (MICE): Emulation of a tsunami model. *SIAM/ASA Journal on Uncertainty Quantification*, 4(1):739–766, ???? 2016. CODEN SJUQA3. ISSN 2166-2525.

Bocquet:2017:DKF

[BGA+17] Marc Bocquet, Karthik S. Gurumoorthy, Amit Apte, Alberto Carrassi, Colin Grudzien, and Christopher K. R. T. Jones. Degenerate Kalman filter error covariances and their convergence onto the unstable subspace. *SIAM/ASA Journal on Uncertainty Quantification*, 5(1):304–333, ???? 2017. CODEN SJUQA3. ISSN 2166-2525.

Borggaard:2020:BAE

[BGHK20] Jeff Borggaard, Nathan Glatt-Holtz, and Justin Krometis. A Bayesian approach to estimating background flows from a passive scalar. *SIAM/ASA Journal on Uncertainty Quantification*, 8(3):1036–1060, ???? 2020. CODEN SJUQA3. ISSN 2166-2525.

Bachouch:2016:ERM

[BGM16] Achref Bachouch, Emmanuel Gobet, and Anis Matoussi. Empirical regression method for backward doubly stochastic differential equations. *SIAM/ASA Journal on Uncertainty Quantification*, 4(1):358–379, ???? 2016. CODEN SJUQA3. ISSN 2166-2525.

Bourgey:2022:CSP

[BGR22] Florian Bourgey, Emmanuel Gobet, and Clément Rey. A comparative study of polynomial-type chaos expansions for indicator functions. *SIAM/ASA Journal on Uncertainty Quantification*, 10(4):1350–1383, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/21M1413146`.

Bergou:2016:LMM

[BGV16] E. Bergou, S. Gratton, and L. N. Vicente. Levenberg–Marquardt methods based on probabilistic gradient models and inexact subproblem solution, with application to data assimilation. *SIAM/ASA Journal on Uncertainty Quantification*, 4(1):924–951, ???? 2016. CODEN SJUQA3. ISSN 2166-2525.

Berry:2015:NUQ

[BH15] Tyrus Berry and John Harlim. Nonparametric uncertainty quantification for stochastic gradient flows. *SIAM/ASA Journal on Uncertainty Quantification*, 3(1):484–508, ???? 2015. CODEN SJUQA3. ISSN 2166-2525.

Bader:2023:STM

[BHK+23] Seif Ben Bader, Helmut Harbrecht, Rolf Krause, Michael D. Multerer, Alessio Quaglino, and Marc Schmidlin. Space-time multilevel quadrature methods and their application for cardiac electrophysiology. *SIAM/ASA Journal on Uncertainty Quantification*, 11 (4):1329–1356, December 2023. CODEN SJUQA3. ISSN 2166-2525.

Baptista:2024:CSM

[BHKM24] Ricardo Baptista, Bamdad Hosseini, Nikola B. Kovachki, and Youssef M. Marzouk. Conditional sampling with monotone GANs: From generative models to likelihood-free inference. *SIAM/ASA Journal on Uncertainty Quantification*, 12(3):868–900, ???? 2024. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/23M1581546`.

Blanchard:2018:OAE

[BHR18] Gilles Blanchard, Marc Hoffmann, and Markus Reiß. Optimal adaptation for early stopping in statistical inverse problems. *SIAM/ASA Journal on Uncertainty Quantification*, 6 (3):1043–1075, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Braverman:2021:PHU

[BHTG21] Amy Braverman, Jonathan Hobbs, Joaquim Teixeira, and Michael Gunson. Post hoc uncertainty quantification for remote sensing observing systems. *SIAM/ASA Journal on Uncertainty Quantification*, 9 (3):1064–1093, ???? 2021. CODEN SJUQA3. ISSN 2166-2525.

Belomestny:2021:VRD

[BIM+21] Denis Belomestny, Leonid Iosipoi, Eric Moulines, Alexey Naumov, and Sergey Samsonov. Variance reduction for dependent sequences with applications to stochastic gradient MCMC. *SIAM/ASA Journal on Uncertainty Quantification*, 9(2):507–535, ???? 2021. CODEN SJUQA3. ISSN 2166-2525.

Beskos:2018:MSM

[BJL+18] Alexandros Beskos, Ajay Jasra, Kody Law, Youssef Marzouk, and Yan Zhou. Multilevel sequential Monte Carlo with dimension-independent likelihood-informed proposals. *SIAM/ASA Journal on Uncertainty Quantification*, 6(2):762–786, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Berlyand:2016:CRM

[BJP16] Leonid Berlyand, Pierre-Emmanuel Jabin, and Mykhailo Potomkin. Complexity reduction in many particle systems with random initial data. *SIAM/ASA Journal on Uncertainty Quantification*, 4(1):446–474, ???? 2016. CODEN SJUQA3. ISSN 2166-2525.

Birmpa:2021:UQM

[BK21] Panagiota Birmpa and Markos A. Katsoulakis. Uncertainty quantification for Markov random fields. *SIAM/ASA Journal on Uncertainty Quantification*, 9(4):1457–1498, ???? 2021. CODEN SJUQA3. ISSN 2166-2525.

Bousquet:2018:ALS

[BKM18] N. Bousquet, T. Klein, and V. Moutoussamy. Approximation of limit state surfaces in monotonic Monte Carlo settings, with applications to classification. *SIAM/ASA Journal on Uncertainty Quantification*, 6(1):1–33, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Baumgarten:2024:FPB

[BKW24] Niklas Baumgarten, Sebastian Krumscheid, and Christian Wieners. A fully parallelized and budgeted multilevel Monte Carlo method and the application to acoustic waves. *SIAM/ASA Journal on Uncertainty Quantification*, 12(3):901–931, ???? 2024. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/23M1588354`.

Abdellah:2021:DER

[BLOP21] Amal Ben Abdellah, Pierre L'Ecuyer, Art B. Owen, and Florian Puchhammer. Density estimation by randomized quasi-Monte Carlo. *SIAM/ASA Journal on Uncertainty Quantification*, 9(1):280–301, ???? 2021. CODEN SJUQA3. ISSN 2166-2525.

Belomestny:2015:MSB

[BLS15] Denis Belomestny, Marcel Ladkau, and John Schoenmakers. Multilevel simulation based policy iteration for optimal stopping-convergence and complexity. *SIAM/ASA Journal on Uncertainty Quantification*, 3(1):460–483, ???? 2015. CODEN SJUQA3. ISSN 2166-2525.

Bertozzi:2018:UQG

[BLSZ18] Andrea L. Bertozzi, Xiyang Luo, Andrew M. Stuart, and Konstantinos C. Zygalakis. Uncertainty quantification in graph-based classification of high dimensional data. *SIAM/ASA Journal on Uncertainty Quantification*, 6(2):568–595, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Bect:2017:BSS

[BLV17] Julien Bect, Ling Li, and Emmanuel Vazquez. Bayesian subset simulation. *SIAM/ASA Journal on Uncertainty Quantification*, 5(1):762–786, ???? 2017. CODEN SJUQA3. ISSN 2166-2525.

Babyale:2025:MEC

[BMCA25] Sandra R. Babyale, Jodi Mead, Donna Calhoun, and Patricia O. Azike. Model error covariance estimation for weak constraint variational data assimilation. *SIAM/ASA Journal on Uncertainty Quantification*, 13(4):1828–1861, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/24M1695889`.

Borgonovo:2018:FAM

[BMP18] Emanuele Borgonovo, Max D. Morris, and Elmar Plischke. Functional ANOVA with multiple distributions: Implications for the sensitivity analysis of computer experiments. *SIAM/ASA Journal on Uncertainty Quantification*, 6(1):397–427, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Bonizzoni:2014:PAD

[BN14] Francesca Bonizzoni and Fabio Nobile. Perturbation analysis for the Darcy problem with log-normal permeability. *SIAM/ASA Journal on Uncertainty Quantification*, 2(1):223–244, ???? 2014. CODEN SJUQA3. ISSN 2166-2525.

Belomestny:2025:SIC

[BO25] Denis Belomestny and Tatiana Orlova. Statistical inference for conservation law McKean–Vlasov SDEs via deep neural networks. *SIAM/ASA Journal on Uncertainty Quantification*, 13(2):425–448, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/24M1668949`.

Benner:2015:LRS

[BOS15] Peter Benner, Akwum Onwunta, and Martin Stoll. Low-rank solution of unsteady diffusion equations with stochastic coefficients. *SIAM/ASA Journal on Uncertainty Quantification*, 3(1):622–649, ???? 2015.

CODEN SJUQA3. ISSN 2166-2525.

Bulthuis:2020:MQB

[BPA20] Kevin Bulthuis, Frank Pattyn, and Maarten Arnst. A multifidelity quantile-based approach for confidence sets of random excursion sets with application to ice-sheet dynamics. *SIAM/ASA Journal on Uncertainty Quantification*, 8(3): 860–890, ???? 2020. CODEN SJUQA3. ISSN 2166-2525.

Bespalov:2021:TLP

[BPR21] Alex Bespalov, Dirk Praetorius, and Michele Ruggeri. Two-level a posteriori error estimation for adaptive multilevel stochastic Galerkin finite element method. *SIAM/ASA Journal on Uncertainty Quantification*, 9(3): 1184–1216, ???? 2021. CODEN SJUQA3. ISSN 2166-2525.

Bespalov:2025:GOE

[BPRS25] Alex Bespalov, Dirk Praetorius, Thomas Round, and Andrey Savinov. Goal-oriented error estimation and adaptivity for stochastic collocation FEM. *SIAM/ASA Journal on Uncertainty Quantification*, 13(2):613–638, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/24M1673280`.

Bryant:2015:EDA

[BPW15] C. M. Bryant, S. Prudhomme, and T. Wildey. Error decomposition and adaptivity for response surface approximations from PDEs with parametric uncertainty. *SIAM/ASA Journal on Uncertainty Quantification*, 3(1):1020–1045, ???? 2015. CODEN SJUQA3. ISSN 2166-2525.

Benner:2018:LRE

[BQS18] Peter Benner, Yue Qiu, and Martin Stoll. Low-rank eigenvector compression of posterior covariance matrices for linear Gaussian inverse problems. *SIAM/ASA Journal on Uncertainty Quantification*, 6(2):965–989, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Bespalov:2018:EAA

[BR18] Alex Bespalov and Leonardo Rocchi. Efficient adaptive algorithms for elliptic PDEs with random data. *SIAM/ASA Journal on Uncertainty Quantification*, 6(1):243–272, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Barr:2022:GKM

[BR22] John Barr and Herschel Rabitz. A generalized kernel method for global sensitivity analysis. *SIAM/ASA Journal on Uncertainty Quantification*, 10(1):27–54, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/20M1354829`.

Ballester-Ripoll:2024:CSM

[BR24] Rafael Ballester-Ripoll. Computing statistical moments via tensorization of polynomial chaos expansions. *SIAM/ASA Journal on Uncertainty Quantification*, 12(2):289–308, April 2024. CODEN SJUQA3. ISSN 2166-2525.

Birrell:2020:UQM

[BRB20] Jeremiah Birrell and Luc Rey-Bellet. Uncertainty quantification for Markov processes via variational principles and functional inequalities. *SIAM/ASA Journal on Uncertainty Quantification*, 8(2):539–572, ???? 2020. CODEN SJUQA3. ISSN 2166-2525.

BenSalem:2017:UPD

[BRGT17] Malek Ben Salem, Olivier Roustant, Fabrice Gamboa, and Lionel Tomaso. Universal prediction distribution for surrogate models. *SIAM/ASA Journal on Uncertainty Quantification*, 5(1):1086–1109, ???? 2017. CODEN SJUQA3. ISSN 2166-2525.

Ballester-Ripoll:2018:TAA

[BRPP18] Rafael Ballester-Ripoll, Enrique G. Paredes, and Renato Pajarola. Tensor algorithms for advanced sensitivity metrics. *SIAM/ASA Journal on Uncertainty Quantification*, 6 (3):1172–1197, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Batou:2013:CLM

[BS13a] A. Batou and C. Soize. Calculation of Lagrange multipliers in the construction of maximum entropy distributions in high stochastic dimension. *SIAM/ASA Journal on Uncertainty Quantification*, 1(1):431–451, ???? 2013. CODEN SJUQA3. ISSN 2166-2525.

Bender:2013:PEB

[BS13b] Christian Bender and Jessica Steiner. A posteriori estimates for backward SDEs. *SIAM/ASA Journal on Uncertainty Quantification*, 1(1):139–163, ???? 2013. CODEN SJUQA3. ISSN 2166-2525.

Barth:2018:SEP

[BS18] Andrea Barth and Andreas Stein. A study of elliptic partial differential equations with jump diffusion coefficients. *SIAM/ASA Journal on Uncertainty Quantification*, 6(4): 1707–1743, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Blanchard:2021:OWO

[BS21] Antoine Blanchard and Themistoklis Sapsis. Output-weighted optimal sampling for Bayesian experimental design and uncertainty quantification. *SIAM/ASA Journal on Uncertainty Quantification*, 9(2):564–592, ???? 2021. CODEN SJUQA3. ISSN 2166-2525.

Blanchet-Scalliet:2023:GPR

[BSDGH23] Christophette Blanchet-Scalliet, Bruno Demory, Thierry Gonon, and Céline Helbert. Gaussian process regression on nested spaces. *SIAM/ASA Journal on Uncertainty Quantification*, 11(2):426–451, ???? 2023. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/21M1445053`.

Bardsley:2015:RTO

[BSS+15] Johnathan M. Bardsley, Aku Seppänen, Antti Solonen, Heikki Haario, and Jari Kaipio. Randomize-then-optimize for sampling and uncertainty quantification in electrical impedance tomography. *SIAM/ASA Journal on Uncertainty Quantification*, 3(1):1136–1158, ???? 2015. CODEN SJUQA3. ISSN 2166-2525.

Barajas-Solano:2016:SCM

[BST16] David A. Barajas-Solano and Daniel M. Tartakovsky. Stochastic collocation methods for nonlinear parabolic equations with random coefficients. *SIAM/ASA Journal on Uncertainty Quantification*, 4(1):475–494, ???? 2016. CODEN SJUQA3. ISSN 2166-2525.

Barajas-Solano:2018:PCD

[BST18] David A. Barajas-Solano and Alexandre M. Tartakovsky. Probability and cumulative density function methods for the stochastic advection–reaction equation. *SIAM/ASA Journal on Uncertainty Quantification*, 6(1):180–212, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Brown:2018:LRI

[BSV18] D. Andrew Brown, Arvind Saibaba, and Sarah Vallélian. Low-rank independence samplers in hierarchical Bayesian inverse problems. *SIAM/ASA Journal on Uncertainty Quantification*, 6(3):1076–1100, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Bui-Thanh:2014:AID

[BTG14] Tan Bui-Thanh and Omar Ghattas. An analysis of infinite dimensional Bayesian inverse shape acoustic scattering and its numerical approximation. *SIAM/ASA Journal on Uncertainty Quantification*, 2(1):203–222, ???? 2014. CODEN SJUQA3. ISSN 2166-2525.

Branicki:2021:LUQ

[BU21] Michal Branicki and Kenneth Uda. Lagrangian uncertainty quantification and information inequalities for stochastic flows. *SIAM/ASA Journal on Uncertainty Quantification*, 9(3):1242–1313, ???? 2021. CODEN SJUQA3. ISSN 2166-2525.

Bowman:2016:EMS

[BW16] Veronica E. Bowman and David C. Woods. Emulation of multivariate simulators using thin-plate splines with application to atmospheric dispersion. *SIAM/ASA Journal on Uncertainty Quantification*, 4 (1):1323–1344, ???? 2016. CODEN SJUQA3. ISSN 2166-2525.

Bungert:2023:CDD

[BW23] Leon Bungert and Philipp Wacker. Complete deterministic dynamics and spectral decomposition of the linear ensemble Kalman inversion. *SIAM/ASA Journal on Uncertainty Quantification*, 11(1):320–357, ???? 2023. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/21M1429461`.

Chen:2023:SPB

[CA23] Yian Chen and Mihai Anitescu. Scalable physics-based maximum likelihood estimation using hierarchical matrices. *SIAM/ASA Journal on Uncertainty Quantification*, 11(2):682–725, ???? 2023. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/21M1458880`.

Chaudhry:2018:EDE

[CBE18] Jehanzeb H. Chaudhry, Nathanial Burch, and Donald Estep. Efficient distribution estimation and uncertainty quantification for elliptic problems on domains with stochastic boundaries. *SIAM/ASA Journal on Uncertainty Quantification*, 6 (3):1127–1150, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Capistran:2016:BAO

[CCD16] Marcos A. Capistrán, J. Andrés Christen, and Sophie Donnet. Bayesian analysis of ODEs: Solver optimal accuracy and Bayes factors. *SIAM/ASA Journal on Uncertainty Quantification*, 4(1):829–849, ???? 2016. CODEN SJUQA3. ISSN 2166-2525.

Chennetier:2024:AIS

[CCDG24] Guillaume Chennetier, Hassane Chraibi, Anne Dutfoy, and Josselin Garnier. Adaptive importance sampling based on fault tree analysis for piecewise deterministic Markov process. *SIAM/ASA Journal on Uncertainty Quantification*, 12 (1):128–156, March 2024. CODEN SJUQA3. ISSN 2166-2525.

Cotter:2020:PFS

[CCH+20] Colin Cotter, Dan Crisan, Darryl D. Holm, Wei Pan, and Igor Shevchenko. A particle filter for stochastic advection by Lie transport: a case study for the damped and forced incompressible two-dimensional Euler equation. *SIAM/ASA Journal on Uncertainty Quantification*, 8(4):1446–1492, ???? 2020. CODEN SJUQA3. ISSN 2166-2525.

Cotter:2019:ETA

[CCR19] Colin Cotter, Simon Cotter, and Paul Russell. Ensemble transport adaptive importance sampling. *SIAM/ASA Journal on Uncertainty Quantification*, 7(2):444–471, ???? 2019. CODEN SJUQA3. ISSN 2166-2525.

Callahan:2017:BML

[CCS17] Margaret Callahan, Daniela Calvetti, and Erkki Somersalo. Beyond the model limit: Parameter inference across scales. *SIAM/ASA Journal on Uncertainty Quantification*, 5(1):665–693, ???? 2017. CODEN SJUQA3. ISSN 2166-2525.

Chen:2022:AAP

[CCZW22] Jialei Chen, Zhehui Chen, Chuck Zhang, and C. F. Jeff Wu. APIK: Active physics-informed kriging model with partial differential equations. *SIAM/ASA Journal on Uncertainty Quantification*, 10(1):481–506, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/20M1389285`.

Cockayne:2021:PGF

[CD21] Jonathan Cockayne and Andrew Duncan. Probabilistic gradients for fast calibration of differential equation models. *SIAM/ASA Journal on Uncertainty Quantification*, 9(4):1643–1672, ???? 2021. CODEN SJUQA3. ISSN 2166-2525.

Cerou:2019:ANA

[CDGR19] Frédéric Cérou, Bernard Delyon, Arnaud Guyader, and Mathias Rousset. On the asymptotic normality of adaptive multilevel splitting. *SIAM/ASA Journal on Uncertainty Quantification*, 7(1):1–30, ???? 2019. CODEN SJUQA3. ISSN 2166-2525.

Conrad:2018:PLA

[CDM+18] Patrick R. Conrad, Andrew D. Davis, Youssef M. Marzouk, Natesh S. Pillai, and Aaron Smith. Parallel local approximation MCMC for expensive models. *SIAM/ASA Journal on Uncertainty Quantification*, 6(1):339–373, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Cohen:2022:NRM

[CDMN22] Albert Cohen, Wolfgang Dahmen, Olga Mula, and James Nichols. Nonlinear reduced models for state and parameter estimation. *SIAM/ASA Journal on Uncertainty Quantification*, 10(1):227–267, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/20M1380818`.

Chen:2022:SPP

[CDS22] Nan Chen, Quanling Deng, and Samuel Stechmann. Superfloe parameterization with physics constraints for uncertainty quantification of sea ice floes. *SIAM/ASA Jour-*

nal on Uncertainty Quantification, 10(4):1384–1409, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL https://epubs.siam.org/doi/10.1137/21M1428777.

Chakroborty:2025:CFB

[CDS25] Promit Chakroborty, Somayajulu L. N. Dhulipala, and Michael D. Shields. Covariance-free bifidelity control variates importance sampling for rare event reliability analysis. *SIAM/ASA Journal on Uncertainty Quantification*, 13 (3):1406–1451, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL https://epubs.siam.org/doi/10.1137/24M1658498.

Chaudhry:2015:PAI

[CEGT15] J. H. Chaudhry, D. Estep, V. Ginting, and S. Tavener. A posteriori analysis for iterative solvers for nonautonomous evolution problems. *SIAM/ASA Journal on Uncertainty Quantification*, 3(1):434–459, ???? 2015. CODEN SJUQA3. ISSN 2166-2525.

Crepey:2020:UQS

[CFGS20] S. Crépey, G. Fort, E. Gobet, and U. Stazhynski. Uncertainty quantification for stochastic approximation limits using chaos expansion. *SIAM/ASA Journal on Uncertainty Quantification*, 8(3):1061–1089, ???? 2020. CODEN SJUQA3. ISSN 2166-2525.

Chada:2021:UID

[CFJ+21] Neil K. Chada, Jordan Franks, Ajay Jasra, Kody J. Law, and Matti Vihola. Unbiased inference for discretely observed hidden Markov model diffusions. *SIAM/ASA Journal on Uncertainty Quantification*, 9(2):763–787, ???? 2021. CODEN SJUQA3. ISSN 2166-2525.

Cartee:2023:QMU

[CFN+23] Elliot Cartee, Antonio Farah, April Nellis, Jacob Van Hook, and Alexander Vladimirsky. Quantifying and managing uncertainty in piecewise-deterministic Markov processes. *SIAM/ASA Journal on Uncertainty Quantification*, 11(3):814–847, ???? 2023. CODEN SJUQA3. ISSN 2166-2525. URL https://epubs.siam.org/doi/10.1137/20M1357275.

Chen:2021:TAC

[CG21] Peng Chen and Omar Ghattas. Taylor approximation for chance constrained optimization problems governed by partial differential equations with high-dimensional random parameters. *SIAM/ASA Journal on Uncertainty Quantification*, 9(4):1381–1410, ???? 2021. CODEN SJUQA3. ISSN 2166-2525.

Churchill:2022:SBS

[CG22] Victor Churchill and Anne Gelb. Sampling-based spotlight SAR image reconstruction from phase history data for speckle reduction and uncertainty quantification. *SIAM/ASA Journal on Uncertainty Quantification*, 10(3):1225–1249, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/20M1379721`.

Comte:2024:NEI

[CGC24] Fabienne Comte and Valentine Genon-Catalot. Nonparametric estimation for independent and identically distributed stochastic differential equations with space-time dependent coefficients. *SIAM/ASA Journal on Uncertainty Quantification*, 12(2):377–410, May 2024. CODEN SJUQA3. ISSN 2166-2525.

Chen:2014:MAP

[CGHM14] Nan Chen, Dimitrios Giannakis, Radu Herbei, and Andrew J. Majda. An MCMC algorithm for parameter estimation in signals with hidden intermittent instability. *SIAM/ASA Journal on Uncertainty Quantification*, 2(1):647–669, ???? 2014. CODEN SJUQA3. ISSN 2166-2525.

Croci:2018:EWN

[CGRF18] M. Croci, M. B. Giles, M. E. Rognes, and P. E. Farrell. Efficient white noise sampling and coupling for multilevel Monte Carlo with nonnested meshes. *SIAM/ASA Journal on Uncertainty Quantification*, 6(4):1630–1655, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Charrier:2015:NAA

[Cha15] Julia Charrier. Numerical analysis of the advection-diffusion of a solute in porous media with uncertainty. *SIAM/ASA Journal on Uncertainty Quantification*, 3(1):650–685, ???? 2015. CODEN SJUQA3. ISSN 2166-2525.

Chen:2020:ICC

[Che20] Nan Chen. An information criterion for choosing observation locations in data assimilation and prediction. *SIAM/ASA Journal on Uncertainty Quantification*, 8(4):1548–1573, ???? 2020. CODEN SJUQA3. ISSN 2166-2525.

Clason:2019:GMB

[CHKP19] Christian Clason, Tapio Helin, Remo Kretschmann, and Petteri Piiroinen. Generalized modes in Bayesian inverse problems. *SIAM/ASA Journal on Uncertainty Quantification*, 7(2):652–684, ???? 2019. CODEN SJUQA3. ISSN 2166-2525.

Cox:2022:MCM

[CHKW22] Alexander M. G. Cox, Simon C. Harris, Andreas E. Kyprianou, and Minmin Wang. Monte Carlo methods for the neutron transport equation. *SIAM/ASA Journal on Uncertainty Quantification*, 10(2):775–825, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/21M1390578`.

Cheng:2013:DDS

[CHYZ13] Mulin Cheng, Thomas Y. Hou, Mike Yan, and Zhiwen Zhang. A data-driven stochastic method for elliptic PDEs with random coefficients. *SIAM/ASA Journal on Uncertainty Quantification*, 1(1): 452–493, ???? 2013. CODEN SJUQA3. ISSN 2166-2525.

Chada:2022:MEK

[CJY22] Neil K. Chada, Ajay Jasra, and Fangyuan Yu. Multilevel ensemble Kalman–Bucy filters. *SIAM/ASA Journal on Uncertainty Quantification*, 10(2):584–618, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/21M1423762`.

Chak:2023:GLE

[CKP23] Martin Chak, Nikolas Kantas, and Grigorios A. Pavliotis. On the generalized Langevin equation for simulated annealing. *SIAM/ASA Journal on Uncertainty Quantification*, 11(1):139–167, ???? 2023. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/21M1462970`.

Cotter:2020:TMA

[CKR20] Simon L. Cotter, Ioannis G. Kevrekidis, and Paul T. Russell. Transport map accelerated adaptive importance sampling, and application to inverse problems arising from multiscale stochastic reaction networks. *SIAM/ASA Journal on Uncertainty Quantification*, 8(4):1383–1413, ???? 2020. CODEN SJUQA3. ISSN 2166-2525.

Chen:2025:SGG

[CKRBZ25] Ziyu Chen, Markos A. Katsoulakis, Luc Rey-Bellet, and Wei Zhu. Statistical guarantees of group-invariant GANs. *SIAM/ASA Journal on Uncertainty Quantification*, 13 (2):862–890, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/24M1666628`.

Cvetkovic:2024:COO

[CLBV24] Nada Cvetković, Han Cheng Lie, Harshit Bansal, and Karen Veroy. Choosing observation operators to mitigate model error in Bayesian inverse problems. *SIAM/ASA Journal on Uncertainty Quantification*, 12(3):723–758, ???? 2024. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/23M1602140`.

Chevreuil:2015:LSM

[CLNR15] M. Chevreuil, R. Lebrun, A. Nouy, and P. Rai. A least-squares method for sparse low rank approximation of multivariate functions. *SIAM/ASA Journal on Uncertainty Quantification*, 3(1):897–921, ???? 2015. CODEN SJUQA3. ISSN 2166-2525.

Coleman:2019:GFC

[CLS+19] Kayla D. Coleman, Allison Lewis, Ralph C. Smith, Brian Williams, Max Morris, and Bassam Khuwaileh. Gradient-free construction of active subspaces for dimension reduction in complex models with applications to neutronics. *SIAM/ ASA Journal on Uncertainty Quantification*, 7(1):117–142, ???? 2019. CODEN SJUQA3. ISSN 2166-2525.

Chen:2017:FCS

[CLW17] Hao Chen, Jason L. Loeppky, and William J. Welch. Flexible correlation structure for accurate prediction and uncertainty quantification in Bayesian Gaussian process emulation of a computer model. *SIAM/ASA Journal on Uncertainty Quantification*, 5(1):598–620, ???? 2017. CODEN SJUQA3. ISSN 2166-2525.

Crisan:2020:SAS

[CLYM20] Dan Crisan, Alberto López-Yela, and Joaquin Miguez. Stable approximation schemes for optimal filters. *SIAM/ASA Journal on Uncertainty Quantification*, 8(1):483–509, ???? 2020. CODEN SJUQA3. ISSN 2166-2525.

Chen:2018:RAE

[CMT18] Nan Chen, Andrew J. Majda, and Xin T. Tong. Rigorous analysis for efficient statistically accurate algorithms for solving Fokker–Planck equations in large dimensions. *SIAM/ASA Journal on Uncertainty Quantification*, 6(3): 1198–1223, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Cheng:2024:SPM

[CMX+24] Nuojin Cheng, Osman Asif Malik, Yiming Xu, Stephen Becker, Alireza Doostan, and Akil Narayan. Subsampling of parametric models with bifidelity boosting. *SIAM/ASA Journal on Uncertainty Quantification*, 12(2):213–241, April 2024. CODEN SJUQA3. ISSN 2166-2525.

Constantinescu:2020:STI

[CPBP20] Emil M. Constantinescu, Noémi Petra, Julie Bessac, and Cosmin G. Petra. Statistical treatment of inverse problems constrained by differential equations-based models with stochastic terms. *SIAM/ASA Journal on Uncertainty Quantification*, 8(1):170–197, ???? 2020. CODEN SJUQA3. ISSN 2166-2525.

Chen:2014:WRB

[CQ14] Peng Chen and Alfio Quarteroni. Weighted reduced basis method for stochastic optimal control problems with elliptic PDE constraint. *SIAM/ASA Journal on Uncertainty Quantification*, 2(1):364–396, ???? 2014. CODEN SJUQA3. ISSN 2166-2525.

Chen:2017:RBM

[CQR17] Peng Chen, Alfio Quarteroni, and Gianluigi Rozza. Reduced basis methods for uncertainty quantification. *SIAM/ASA Journal on Uncertainty Quantification*, 5(1):813–869, ???? 2017. CODEN SJUQA3. ISSN 2166-2525.

Chen:2015:OLE

[CRG+15] Si Chen, Kristofer-Roy G. Reyes, Maneesh K. Gupta, Michael C. McAlpine, and Warren B. Powell. Optimal learning in experimental design using the knowledge gradient policy with application to characterizing nanoemulsion stability. *SIAM/ASA Journal on Uncertainty Quantification*, 3(1): 320–345, ???? 2015. CODEN SJUQA3. ISSN 2166-2525.

Chustagulprom:2016:HET

[CRR16] Nawinda Chustagulprom, Sebastian Reich, and Maria Reinhardt. A hybrid ensemble transform particle filter for nonlinear and spatially extended dynamical systems. *SIAM/ASA Journal on Uncertainty Quantification*, 4(1):592–608, ???? 2016. CODEN SJUQA3. ISSN 2166-2525.

Chernov:2023:SBF

[CS23] Alexey Chernov and Erik Marc Schetzke. A simple, bias-free approximation of covariance functions by the multilevel Monte Carlo method having nearly optimal complexity. *SIAM/ASA Journal on Uncertainty Quantification*, 11(3):941–969, ???? 2023. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/22M1506845`.

Calvetti:2024:CES

[CS24a] D. Calvetti and E. Somersalo. Computationally efficient sampling methods for sparsity promoting hierarchical Bayesian models. *SIAM/ASA Journal on Uncertainty Quantification*, 12(2):524–548, ???? 2024. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/23M1564043`.

Cui:2024:QER

[CS24b] Jianbo Cui and Liying Sun. Quantifying the effect of random dispersion for logarithmic Schrödinger equation. *SIAM/ASA Journal on Uncertainty Quantification*, 12(2):579–613, ???? 2024. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/23M1578619`.

Chen:2025:PCF

[CSA25] Jiaheng Chen and Daniel Sanz-Alonso. Precision and Cholesky factor estimation for Gaussian processes. *SIAM/ASA Journal on Uncertainty Quantification*, 13(3):1085–1115, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL `https:`

//epubs.siam.org/doi/10.1137/24M1717282.

Cesmelioglu:2017:PBK

[CSD17] A. Cesmelioglu, M. Song, and D. Drignei. Physics-based kriging surrogates for a class of finite element codes. *SIAM/ASA Journal on Uncertainty Quantification*, 5(1):870–889, ???? 2017. CODEN SJUQA3. ISSN 2166-2525.

Curran-Sebastian:2024:CEF

[CSPHH24] Jacob Curran-Sebastian, Lorenzo Pellis, Ian Hall, and Thomas House. Calculation of epidemic first passage and peak time probability distributions. *SIAM/ASA Journal on Uncertainty Quantification*, 12(2):242–261, April 2024. CODEN SJUQA3. ISSN 2166-2525.

Christensen:2024:DDR

[CTT24] Sören Christensen, Asbjørn Holk Thomsen, and Lukas Trottner. Data-driven rules for multidimensional reflection problems. *SIAM/ASA Journal on Uncertainty Quantification*, 12(4):1240–1272, ???? 2024. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/23M1618570`.

Chauveau:2025:EBB

[CV25] Didier Chauveau and Pierre Vandekerkhove. Entropy-based burn-in time analysis and ranking for (A)MCMC algorithms in high dimension. *SIAM/ASA Journal on Uncertainty Quantification*, 13(1):251–277, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/23M1611932`.

Chi:2025:SPO

[CWD25] Chris Chi, Jonathan Weare, and Aaron R. Dinner. Sampling parameters of ordinary differential equations with constrained Langevin dynamics. *SIAM/ASA Journal on Uncertainty Quantification*, 13(3):1374–1405, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/24M1691569`.

Damblin:2018:AND

[DBK+18] Guillaume Damblin, Pierre Barbillon, Merlin Keller, Alberto Pasanisi, and Éric Parent. Adaptive numerical designs for the calibration of computer codes. *SIAM/ASA Journal on Uncertainty Quantification*, 6(1):151–179, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Drohmann:2015:RMS

[DC15] Martin Drohmann and Kevin Carlberg. The ROMES method for statistical modeling of reduced-order-model error. *SIAM/ASA Journal on Uncertainty Quantification*, 3(1):116–145, ???? 2015. CODEN SJUQA3. ISSN 2166-2525.

Das:2016:PAD

[DC16] Sonjoy Das and Sourish Chakravarty. Predictive algorithm for detection of microcracks from macroscale observables. *SIAM/ASA Journal on Uncertainty Quantification*, 4(1):660–707, ???? 2016. CODEN SJUQA3. ISSN 2166-2525.

Detommaso:2019:CLM

[DDS19] Gianluca Detommaso, Tim Dodwell, and Rob Scheichl. Continuous level Monte Carlo and sample-adaptive model hierarchies. *SIAM/ASA Journal on Uncertainty Quantification*, 7(1):93–116, ???? 2019. CODEN SJUQA3. ISSN 2166-2525.

DElia:2018:EGS

[DEH+18] M. D'Elia, H. C. Edwards, J. Hu, E. Phipps, and S. Rajamanickam. Ensemble grouping strategies for embedded stochastic collocation methods applied to anisotropic diffusion problems. *SIAM/ASA Journal on Uncertainty Quantification*, 6(1):87–117, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Djurdjevac:2018:ESF

[DEKR18] Ana Djurdjevac, Charles M. Elliott, Ralf Kornhuber, and Thomas Ranner. Evolving surface finite element methods for random advection–diffusion equations. *SIAM/ASA Journal on Uncertainty Quantification*, 6(4):1656–1684, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Ditkowski:2020:DEU

[DFS20] Adi Ditkowski, Gadi Fibich, and Amir Sagiv. Density estimation in uncertainty propagation problems using a surrogate model. *SIAM/ASA Journal on Uncertainty Quantification*, 8(1):261–300, ???? 2020. CODEN SJUQA3. ISSN 2166-2525.

DElia:2013:CGS

[DG13] Marta D'Elia and Max Gunzburger. Coarse-grid sampling interpolatory methods for approximating Gaussian random fields. *SIAM/ASA Journal on Uncertainty Quantification*, 1(1):270–296, ???? 2013. CODEN SJUQA3. ISSN 2166-2525.

Dasgupta:2019:FPE

[DG19] Agnimitra Dasgupta and Debraj Ghosh. Failure probability estimation of linear time varying systems by progressive refinement of reduced order models. *SIAM/ASA Journal on Uncertainty Quantification*, 7(3):1007–1028, ???? 2019. CODEN SJUQA3. ISSN 2166-2525.

Dambrine:2025:SOU

[DGHM25] Marc Dambrine, Giulio Gargantini, Helmut Harbrecht, and Jérôme Maynadier. Shape optimization under constraints on the probability of a quadratic functional to exceed a given threshold. *SIAM/ASA Journal on Uncertainty Quantification*, 13(3):931–956, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/23M1605107`.

Dematteis:2019:EEQ

[DGVE19] Giovanni Dematteis, Tobias Grafke, and Eric Vanden-Eijnden. Extreme event quantification in dynamical systems with random components. *SIAM/ASA Journal on Uncertainty Quantification*, 7(3):1029–1059, ???? 2019. CODEN SJUQA3. ISSN 2166-2525.

Du:2025:UMC

[DH25] Jiarui Du and Zhijian He. Unbiased Markov chain quasi-Monte Carlo for Gibbs samplers. *SIAM/ASA Journal on Uncertainty Quantification*, 13(3):1174–1199, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/24M1660747`.

deHoop:2023:CRL

[dHKNS23] Maarten V. de Hoop, Nikola B. Kovachki, Nicholas H. Nelsen, and Andrew M. Stuart. Convergence rates for learning linear operators from noisy data. *SIAM/ASA Journal on Uncertainty Quantification*, 11(2):480–513, ???? 2023. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/21M1442942`.

Dia:2023:CMB

[Dia23] Ben Mansour Dia. A continuation method in Bayesian inference. *SIAM/ASA Journal on Uncertainty Quantification*, 11(2):646–681, ???? 2023. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/19M130251X`.

Djurdjevac:2021:LPP

[Dju21] Ana Djurdjevac. Linear parabolic problems in random moving domains. *SIAM/ASA Journal on Uncertainty Quantification*, 9(2):848–879, ???? 2021. CODEN SJUQA3. ISSN 2166-2525.

Dolgov:2015:PCE

[DKLM15] Sergey Dolgov, Boris N. Khoromskij, Alexander Litvinenko, and Hermann G. Matthies. Polynomial chaos expansion of random coefficients and the solution of stochastic partial differential equations in the tensor train format. *SIAM/ASA Journal on Uncertainty Quantification*, 3(1):1109–1135, ???? 2015. CODEN SJUQA3. ISSN 2166-2525.

Dupuis:2016:PSI

[DKPP16] Paul Dupuis, Markos A. Katsoulakis, Yannis Pantazis, and Petr Plechác. Path-space information bounds for uncertainty quantification and sensitivity analysis of stochastic dynamics. *SIAM/ASA Journal on Uncertainty Quantification*,

4(1):80–111, ???? 2016. CODEN SJUQA3. ISSN 2166-2525.

Dodwell:2015:HMM

[DKST15] T. J. Dodwell, C. Ketelsen, R. Scheichl, and A. L. Teckentrup. A hierarchical multilevel Markov chain Monte Carlo algorithm with applications to uncertainty quantification in subsurface flow. *SIAM/ ASA Journal on Uncertainty Quantification*, 3(1):1075–1108, ???? 2015. CODEN SJUQA3. ISSN 2166-2525. See erratum [DKST19].

Dodwell:2019:EHM

[DKST19] T. J. Dodwell, C. Ketelsen, R. Scheichl, and A. L. Teckentrup. ERRATUM: A Hierarchical Multilevel Markov Chain Monte Carlo Algorithm with Applications to Uncertainty Quantification in Subsurface Flow. *SIAM/ASA Journal on Uncertainty Quantification*, 7(4):1398–1399, ???? 2019. CODEN SJUQA3. ISSN 2166-2525. See [DKST15].

Dick:2016:HOQ

[DLS16] Josef Dick, Quoc T. Le Gia, and Christoph Schwab. Higher order quasi-Monte Carlo integration for holomorphic, parametric operator equations. *SIAM/ASA Journal on Uncertainty Quantification*, 4(1): 48–79, ???? 2016. CODEN SJUQA3. ISSN 2166-2525.

Dick:2022:EPL

[DLS22] Josef Dick, Marcello Longo, and Christoph Schwab. Extrapolated polynomial lattice rule integration in computational uncertainty quantification. *SIAM/ASA Journal on Uncertainty Quantification*, 10(2):651–686, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/20M1338137`.

Dobson:2021:UCM

[DLZ21] Matthew Dobson, Yao Li, and Jiayu Zhai. Using coupling methods to estimate sample quality of stochastic differential equations. *SIAM/ASA Journal on Uncertainty Quantification*, 9(1):135–162, ???? 2021. CODEN SJUQA3. ISSN 2166-2525.

DelMoral:2015:SMC

[DM15] Pierre Del Moral and Lawrence M. Murray. Sequential Monte Carlo with highly informative observations. *SIAM/ASA Journal on Uncertainty Quantification*, 3(1):969–997, ???? 2015. CODEN SJUQA3. ISSN 2166-2525.

DeLozzo:2016:EDB

[DM16] Matthias De Lozzo and Amandine Marrel. Estimation of the derivative-based global sensitivity measures using a Gaussian process metamodel. *SIAM/ASA Journal on Uncertainty Quantification*, 4(1):

708–738, ???? 2016. CODEN SJUQA3. ISSN 2166-2525.

deMontbrun:2024:CMZ

[dMG24] Étienne de Montbrun and Sébastien Gerchinovitz. Certified multifidelity zeroth-order optimization. *SIAM/ASA Journal on Uncertainty Quantification*, 12(4):1135–1164, ???? 2024. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/23M1591086`.

Deveney:2023:DSA

[DMS23] Teo Deveney, Eike H. Mueller, and Tony Shardlow. Deep surrogate accelerated delayed-acceptance Hamiltonian Monte Carlo for Bayesian inference of spatio-temporal heat fluxes in rotating disc systems. *SIAM/ASA Journal on Uncertainty Quantification*, 11(3):970–995, ???? 2023. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/22M1513113`.

Drovandi:2021:SMH

[DNP21] Christopher Drovandi, David J. Nott, and Daniel E. Pagendam. A semiautomatic method for history matching using sequential Monte Carlo. *SIAM/ASA Journal on Uncertainty Quantification*, 9(3):1034–1063, ???? 2021. CODEN SJUQA3. ISSN 2166-2525.

Dolz:2020:HOP

[Döl20] Jürgen Dölz. A higher order perturbation approach for electromagnetic scattering problems on random domains. *SIAM/ASA Journal on Uncertainty Quantification*, 8(2):748–774, ???? 2020. CODEN SJUQA3. ISSN 2166-2525.

Despres:2016:UPI

[DP16] Bruno Despres and Benoit Perthame. Uncertainty propagation; intrusive kinetic formulations of scalar conservation laws. *SIAM/ASA Journal on Uncertainty Quantification*, 4(1):980–1013, ???? 2016. CODEN SJUQA3. ISSN 2166-2525.

Durante:2018:SGM

[DPP18] Joseph Durante, Raj Patel, and Warren B. Powell. Scenario generation methods that replicate crossing times in spatially distributed stochastic systems. *SIAM/ASA Journal on Uncertainty Quantification*, 6(2):596–626, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

delRosario:2019:LVD

[dRLI19] Zachary del Rosario, Minyong Lee, and Gianluca Iaccarino. Lurking variable detection via dimensional analysis. *SIAM/ASA Journal on Uncertainty Quantification*, 7(1):232–259, ???? 2019. CODEN SJUQA3. ISSN 2166-2525.

Du:2017:RAC

[DS17] Hailiang Du and Leonard A. Smith. Rising above chaotic likelihoods. *SIAM/ASA Jour-*

nal on Uncertainty Quantification, 5(1):246–258, ???? 2017. CODEN SJUQA3. ISSN 2166-2525.

Dolgov:2019:HAL

[DS19] Sergey Dolgov and Robert Scheichl. A hybrid alternating least squares–TT-cross algorithm for parametric PDEs. *SIAM/ASA Journal on Uncertainty Quantification*, 7(1): 260–291, ???? 2019. CODEN SJUQA3. ISSN 2166-2525.

Dinner:2020:SGV

[DTVW20] Aaron R. Dinner, Erik H. Thiede, Brian Van Koten, and Jonathan Weare. Stratification as a general variance reduction method for Markov Chain Monte Carlo. *SIAM/ ASA Journal on Uncertainty Quantification*, 8(3):1139–1188, ???? 2020. CODEN SJUQA3. ISSN 2166-2525.

Duersch:2024:PIU

[Due24] Jed A. Duersch. Projective integral updates for high-dimensional variational inference. *SIAM/ASA Journal on Uncertainty Quantification*, 12 (1):69–100, February 2024. CODEN SJUQA3. ISSN 2166-2525.

Dixon:2024:CEM

[DWBG24] Thomas O. Dixon, James E. Warner, Geoffrey F. Bomarito, and Alex A. Gorodetsky. Covariance expressions for multifidelity sampling with multioutput, multistatistic estimators: Application to approximate control variates. *SIAM/ASA Journal on Uncertainty Quantification*, 12(3):1005–1049, ???? 2024. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/23M1607994`.

Dunlop:2021:SGP

[DY21] Matthew M. Dunlop and Yunan Yang. Stability of Gibbs posteriors from the Wasserstein loss for Bayesian full waveform inversion. *SIAM/ASA Journal on Uncertainty Quantification*, 9(4):1499–1526, ???? 2021. CODEN SJUQA3. ISSN 2166-2525.

Dette:2021:RKH

[DZ21] Holger Dette and Anatoly A. Zhigljavsky. Reproducing kernel Hilbert spaces, polynomials, and the classical moment problem. *SIAM/ASA Journal on Uncertainty Quantification*, 9 (4):1589–1614, ???? 2021. CODEN SJUQA3. ISSN 2166-2525.

Easley:2021:HOU

[EB21] Deanna C. Easley and Tyrus Berry. A higher order unscented transform. *SIAM/ASA Journal on Uncertainty Quantification*, 9(3):1094–1131, ???? 2021. CODEN SJUQA3. ISSN 2166-2525.

Everink:2023:BIP

[EDA23] Jasper M. Everink, Yiqiu Dong, and Martin S. Andersen.

Bayesian inference with projected densities. *SIAM/ASA Journal on Uncertainty Quantification*, 11(3):1025–1043, ???? 2023. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/22M150695X`.

Elie-Dit-Cosaque:2022:GOS

[EDCMD22] Kevin Elie-Dit-Cosaque and Veronique Maume-Deschamps. Goal-oriented Shapley effects with special attention to the quantile-oriented case. *SIAM/ASA Journal on Uncertainty Quantification*, 10 (3):1037–1069, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/21M1395247`.

Edeling:2023:DAS

[Ede23] Wouter Edeling. On the deep active-subspace method. *SIAM/ASA Journal on Uncertainty Quantification*, 11(1): 62–90, ???? 2023. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/21M1463240`.

Elfverson:2014:UQA

[EEHM14] Daniel Elfverson, Donald J. Estep, Fredrik Hellman, and Axel Målqvist. Uncertainty quantification for approximate p-quantiles for physical models with stochastic inputs. *SIAM/ASA Journal on Uncertainty Quantification*, 2(1):826–850, ???? 2014. CODEN SJUQA3. ISSN 2166-2525.

Ettehad:2021:ICO

[EF21] Mahmood Ettehad and Simon Foucart. Instances of computational optimal recovery: Dealing with observation errors. *SIAM/ASA Journal on Uncertainty Quantification*, 9(4): 1438–1456, ???? 2021. CODEN SJUQA3. ISSN 2166-2525.

Ehre:2023:CDR

[EFF+23] Max Ehre, Rafael Flock, Martin Fußeder, Iason Papaioannou, and Daniel Straub. Certified dimension reduction for Bayesian updating with the cross-entropy method. *SIAM/ASA Journal on Uncertainty Quantification*, 11(1):358–388, ???? 2023. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/22M1484031`.

Elfverson:2016:MMC

[EHM16] Daniel Elfverson, Fredrik Hellman, and Axel Målqvist. A multilevel Monte Carlo method for computing failure probabilities. *SIAM/ASA Journal on Uncertainty Quantification*, 4 (1):312–330, ???? 2016. CODEN SJUQA3. ISSN 2166-2525.

Elman:2013:RBC

[EL13] Howard C. Elman and Qifeng Liao. Reduced basis collocation methods for partial differential equations with random coefficients. *SIAM/ASA Journal on Uncertainty Quantification*, 1(1):192–217, ???? 2013.

CODEN SJUQA3. ISSN 2166-2525.

Eigel:2016:LEE

[EM16] Martin Eigel and Christian Merdon. Local equilibration error estimators for guaranteed error control in adaptive stochastic higher-order Galerkin finite element methods. *SIAM/ASA Journal on Uncertainty Quantification*, 4 (1):1372–1397, ???? 2016. CODEN SJUQA3. ISSN 2166-2525.

Eigel:2020:ASG

[EMM20] Martin Eigel, Manuel Marschall, and Michael Multerer. An adaptive stochastic Galerkin tensor train discretization for randomly perturbed domains. *SIAM/ASA Journal on Uncertainty Quantification*, 8(3): 1189–1214, ???? 2020. CODEN SJUQA3. ISSN 2166-2525.

Eigel:2016:AMM

[EMN16] Martin Eigel, Christian Merdon, and Johannes Neumann. An adaptive multilevel Monte Carlo method with stochastic bounds for quantities of interest with uncertain data. *SIAM/ASA Journal on Uncertainty Quantification*, 4(1):1219–1245, ???? 2016. CODEN SJUQA3. ISSN 2166-2525.

Ernst:2022:WSR

[EPS22] Oliver G. Ernst, Alois Pichler, and Björn Sprungk. Wasserstein sensitivity of risk and uncertainty propagation. *SIAM/ASA Journal on Uncertainty Quantification*, 10(3):915–948, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/20M1325459`.

Ertel:2025:MFT

[Ert25] Sebastian W. Ertel. On the mean field theory of ensemble Kalman filters for SPDEs. *SIAM/ASA Journal on Uncertainty Quantification*, 13(3):891–930, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/24M1658954`.

Ernst:2015:AEP

[ESS15] Oliver G. Ernst, Björn Sprungk, and Hans-Jörg Starkloff. Analysis of the ensemble and polynomial chaos Kalman filters in Bayesian inverse problems. *SIAM/ASA Journal on Uncertainty Quantification*, 3(1): 823–851, ???? 2015. CODEN SJUQA3. ISSN 2166-2525.

Elfverson:2024:AMS

[ESWD24] D. Elfverson, R. Scheichl, S. Weissmann, and F. A. Diaz De La O. Adaptive multilevel subset simulation with selective refinement. *SIAM/ASA Journal on Uncertainty Quantification*, 12(3):932–963, ???? 2024. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/22M1515240`.

Fillion:2020:IEK

[FBG+20] Anthony Fillion, Marc Bocquet, Serge Gratton, Selime Gürol, and Pavel Sakov. An iterative ensemble Kalman smoother in presence of additive model error. *SIAM/ASA Journal on Uncertainty Quantification*, 8(1):198–228, ???? 2020. CODEN SJUQA3. ISSN 2166-2525.

Fang:2021:ISP

[FG21] Wei Fang and Mike B. Giles. Importance sampling for pathwise sensitivity of stochastic chaotic systems. *SIAM/ASA Journal on Uncertainty Quantification*, 9(3):1217–1241, ???? 2021. CODEN SJUQA3. ISSN 2166-2525.

Friedli:2025:EBM

[FGDL25] Lea Friedli, David Ginsbourger, Arnaud Doucet, and Niklas Linde. An energy-based model approach to rare event probability estimation. *SIAM/ASA Journal on Uncertainty Quantification*, 13(2):400–424, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/23M1605065`.

Fohring:2016:AOE

[FH16] J. Fohring and E. Haber. Adaptive *A*-optimal experimental design for linear dynamical systems. *SIAM/ASA Journal on Uncertainty Quantification*, 4(1):1138–1159, ???? 2016. CODEN SJUQA3. ISSN 2166-2525.

Foucart:2025:WCL

[FH25] Simon Foucart and Nicolas Hengartner. Worst-case learning under a multifidelity model. *SIAM/ASA Journal on Uncertainty Quantification*, 13(1):171–194, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/24M1671025`.

Fadikar:2018:CSA

[FHC+18] Arindam Fadikar, Dave Higdon, Jiangzhuo Chen, Bryan Lewis, Srinivasan Venkatramanan, and Madhav Marathe. Calibrating a stochastic, agent-based model using quantile-based emulation. *SIAM/ASA Journal on Uncertainty Quantification*, 6(4):1685–1706, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Fort:2021:GSA

[FKL21] Jean-Claude Fort, Thierry Klein, and Agnès Lagnoux. Global sensitivity analysis and Wasserstein spaces. *SIAM/ASA Journal on Uncertainty Quantification*, 9(2):880–921, ???? 2021. CODEN SJUQA3. ISSN 2166-2525.

Feng:2015:ENM

[FLL15] Xiaobing Feng, Junshan Lin, and Cody Lorton. An efficient numerical method for acoustic wave scattering in random media. *SIAM/ASA Journal on*

Uncertainty Quantification, 3 (1):790–822, ???? 2015. CODEN SJUQA3. ISSN 2166-2525.

Fajraoui:2017:SDE

[FMS17] Noura Fajraoui, Stefano Marelli, and Bruno Sudret. Sequential design of experiment for sparse polynomial chaos expansions. *SIAM/ASA Journal on Uncertainty Quantification*, 5 (1):1061–1085, ???? 2017. CODEN SJUQA3. ISSN 2166-2525.

Fox:2016:FSL

[FN16] Colin Fox and Richard A. Norton. Fast sampling in a linear-Gaussian inverse problem. *SIAM/ASA Journal on Uncertainty Quantification*, 4 (1):1191–1218, ???? 2016. CODEN SJUQA3. ISSN 2166-2525.

Frenklach:2016:CSD

[FPGD+16] Michael Frenklach, Andrew Packard, Gonzalo Garcia-Donato, Rui Paulo, and Jerome Sacks. Comparison of statistical and deterministic frameworks of uncertainty quantification. *SIAM/ASA Journal on Uncertainty Quantification*, 4 (1):875–901, ???? 2016. CODEN SJUQA3. ISSN 2166-2525.

Francom:2022:LWE

[FSK22] Devin Francom, Bruno Sansó, and Ana Kupresanin. Landmark-warped emulators for models with misaligned functional response. *SIAM/ASA Journal on Uncertainty Quantification*, 10(1):125–150, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/20M135279X`.

Francom:2025:EBM

[FTH+25] Devin Francom, J. Derek Tucker, Gabriel Huerta, Kurtis Shuler, and Daniel Ries. Elastic Bayesian model calibration. *SIAM/ASA Journal on Uncertainty Quantification*, 13(1):195–227, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/24M1644092`.

Feng:2025:ISP

[FYLW25] Xiaoli Feng, Qiang Yao, Peijun Li, and Xu Wang. An inverse source problem for the stochastic multiterm time-fractional diffusion-wave equation. *SIAM/ASA Journal on Uncertainty Quantification*, 13(2):518–542, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/23M1628334`.

Giles:2018:MEE

[GB18] Michael B. Giles and Francisco Bernal. Multilevel estimation of expected exit times and other functionals of stopped diffusions. *SIAM/ASA Journal on Uncertainty Quantification*, 6 (4):1454–1474, ???? 2018. CO-

DEN SJUQA3. ISSN 2166-2525.

Ginsbourger:2014:BAR

[GBC+14] David Ginsbourger, Jean Baccou, Clément Chevalier, Frédéric Perales, Nicolas Garland, and Yann Monerie. Bayesian adaptive reconstruction of profile optima and optimizers. *SIAM/ASA Journal on Uncertainty Quantification*, 2(1):490–510, ???? 2014. CODEN SJUQA3. ISSN 2166-2525.

Golchi:2015:MEC

[GBCC15] S. Golchi, D. R. Bingham, H. Chipman, and D. A. Campbell. Monotone emulation of computer experiments. *SIAM/ASA Journal on Uncertainty Quantification*, 3(1):370–392, ???? 2015. CODEN SJUQA3. ISSN 2166-2525.

Goncharov:2023:NPL

[GBD23] Fedor Goncharov, Éric Barat, and Thomas Dautremer. Nonparametric posterior learning for emission tomography. *SIAM/ASA Journal on Uncertainty Quantification*, 11(2):452–479, ???? 2023. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/21M1463367`.

Grammont:2025:EBK

[GBLL25] Laurence Grammont, François Bachoc, and Andrés F. López-Lopera. Error bounds for a kernel-based constrained optimal smoothing approximation. *SIAM/ASA Journal on Uncertainty Quantification*, 13(3):1145–1173, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/24M1676491`.

Grudzien:2018:AFU

[GCB18] Colin Grudzien, Alberto Carrassi, and Marc Bocquet. Asymptotic forecast uncertainty and the unstable subspace in the presence of additive model error. *SIAM/ASA Journal on Uncertainty Quantification*, 6(4):1335–1363, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Glyn-Davies:2025:SFE

[GDDK+25] Alex Glyn-Davies, Connor Duffin, Ieva Kazlauskaite, Mark Girolami, and Ö. Deniz Akyildiz. Statistical finite elements via interacting particle Langevin dynamics. *SIAM/ASA Journal on Uncertainty Quantification*, 13(3):1200–1227, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/24M1693593`.

Glaubitz:2024:LJS

[GG24] Jan Glaubitz and Anne Gelb. Leveraging joint sparsity in hierarchical Bayesian learning. *SIAM/ASA Journal on Uncertainty Quantification*, 12(2):442–472, May 2024. CODEN SJUQA3. ISSN 2166-2525.

Glaubitz:2023:GSB

[GGS23] Jan Glaubitz, Anne Gelb, and Guohui Song. Generalized sparse Bayesian learning and application to image reconstruction. *SIAM/ASA Journal on Uncertainty Quantification*, 11(1):262–284, ???? 2023. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/22M147236X`.

Giles:2019:MNS

[GHA19] Michael B. Giles and Abdul-Lateef Haji-Ali. Multilevel nested simulation for efficient risk estimation. *SIAM/ASA Journal on Uncertainty Quantification*, 7(2):497–525, ???? 2019. CODEN SJUQA3. ISSN 2166-2525.

Geiersbach:2016:OAF

[GHT16] Caroline Geiersbach, Clemens Heitzinger, and Gerhard Tulzer. Optimal approximation of the first-order corrector in multiscale stochastic elliptic PDE. *SIAM/ASA Journal on Uncertainty Quantification*, 4(1):1246–1262, ???? 2016. CODEN SJUQA3. ISSN 2166-2525.

Gunzburger:2019:EFR

[GIMS19] M. Gunzburger, T. Iliescu, M. Mohebujjaman, and M. Schneier. An evolve-filter-relax stabilized reduced order stochastic collocation method for the time-dependent Navier–Stokes equations. *SIAM/ASA Journal on Uncertainty Quantification*, 7 (4):1162–1184, ???? 2019. CODEN SJUQA3. ISSN 2166-2525.

Galindo:2016:ASC

[GJWZ16] D. Galindo, P. Jantsch, C. G. Webster, and G. Zhang. Accelerating stochastic collocation methods for partial differential equations with random input data. *SIAM/ASA Journal on Uncertainty Quantification*, 4 (1):1111–1137, ???? 2016. CODEN SJUQA3. ISSN 2166-2525.

Grigo:2019:BMD

[GK19] Constantin Grigo and Phaedon-Stelios Koutsourelakis. Bayesian model and dimension reduction for uncertainty propagation: Applications in random media. *SIAM/ASA Journal on Uncertainty Quantification*, 7 (1):292–323, ???? 2019. CODEN SJUQA3. ISSN 2166-2525.

Giordano:2020:BMT

[GK20] Matteo Giordano and Hanne Kekkonen. Bernstein–von Mises theorems and uncertainty quantification for linear inverse problems. *SIAM/ASA Journal on Uncertainty Quantification*, 8(1):342–373, ???? 2020. CODEN SJUQA3. ISSN 2166-2525.

Gao:2025:SBP

[GK25] Zhiwei Gao and George Em Karniadakis. Scalable Bayesian physics-informed Kolmogorov–Arnold networks. *SIAM/ASA*

Journal on Uncertainty Quantification, 13(3):1543–1577, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL https://epubs.siam.org/doi/10.1137/25M1729253.

Guth:2021:QMC

[GKK+21] Philipp A. Guth, Vesa Kaarnioja, Frances Y. Kuo, Claudia Schillings, and Ian H. Sloan. A quasi-Monte Carlo method for optimal control under uncertainty. *SIAM/ASA Journal on Uncertainty Quantification*, 9(2):354–383, ???? 2021. CODEN SJUQA3. ISSN 2166-2525.

Guth:2025:QMC

[GKK25] Philipp A. Guth, Peter Kritzer, and Karl Kunisch. Quasi-Monte Carlo integration for feedback control under uncertainty. *SIAM/ASA Journal on Uncertainty Quantification*, 13(3):1228–1264, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL https://epubs.siam.org/doi/10.1137/24M1695531.

Gamboa:2018:SAB

[GKL18] Fabrice Gamboa, Thierry Klein, and Agnès Lagnoux. Sensitivity analysis based on Cramér–von Mises distance. *SIAM/ASA Journal on Uncertainty Quantification*, 6(2):522–548, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Ganesh:2021:QMC

[GKS21] M. Ganesh, Frances Y. Kuo, and Ian H. Sloan. Quasi-Monte Carlo finite element analysis for wave propagation in heterogeneous random media. *SIAM/ASA Journal on Uncertainty Quantification*, 9(1):106–134, ???? 2021. CODEN SJUQA3. ISSN 2166-2525. See corrigendum [GKS24].

Ganesh:2024:CQM

[GKS24] M. Ganesh, Frances Y. Kuo, and Ian H. Sloan. Corrigendum: Quasi–Monte Carlo finite element analysis for wave propagation in heterogeneous random media. *SIAM/ASA Journal on Uncertainty Quantification*, 12(1):212, March 2024. CODEN SJUQA3. ISSN 2166-2525. See [GKS21].

Green:2025:CVS

[GLG25] Dylan Green, Jonathan Lindbloom, and Anne Gelb. Complex-valued signal recovery using a generalized Bayesian LASSO. *SIAM/ASA Journal on Uncertainty Quantification*, 13(2):831–861, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL https://epubs.siam.org/doi/10.1137/24M1644778.

Gouraud:2025:HUL

[GLMM25] Nicolaï Gouraud, Pierre Le Bris, Adrien Majka, and Pierre Monmarché. HMC and underdamped Langevin united in the unadjusted convex smooth case. *SIAM/ASA Journal on Uncertainty Quantification*, 13(1):278–303, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/23M1608963`.

Gorodetsky:2016:MKI

[GM16] Alex Gorodetsky and Youssef Marzouk. Mercer kernels and integrated variance experimental design: Connections between Gaussian process regression and polynomial approximation. *SIAM/ASA Journal on Uncertainty Quantification*, 4(1):796–828, ???? 2016. CODEN SJUQA3. ISSN 2166-2525.

Gilpin:2022:CCP

[GMC22] Shay Gilpin, Tomoko Matsuo, and Stephen E. Cohn. Continuum covariance propagation for understanding variance loss in advective systems. *SIAM/ASA Journal on Uncertainty Quantification*, 10(3):886–914, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/21M1442449`.

Grote:2022:UQM

[GMN22] Marcus J. Grote, Simon Michel, and Fabio Nobile. Uncertainty quantification by multilevel Monte Carlo and local time-stepping for wave propagation. *SIAM/ASA Journal on Uncertainty Quantification*, 10(4):1601–1628, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/21M1429047`.

Graziani:2024:TAD

[GN24] Carlo Graziani and Marieme Ngom. Targeted adaptive design. *SIAM/ASA Journal on Uncertainty Quantification*, 12(4):1273–1314, ???? 2024. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/22M149898X`.

Giles:2015:MMC

[GNR15] Michael B. Giles, Tigran Nagapetyan, and Klaus Ritter. Multilevel Monte Carlo approximation of distribution functions and densities. *SIAM/ASA Journal on Uncertainty Quantification*, 3(1):267–295, ???? 2015. CODEN SJUQA3. ISSN 2166-2525.

Gramacy:2014:MPA

[GNW14] Robert B. Gramacy, Jarad Niemi, and Robin M. Weiss. Massively parallel approximate Gaussian process regression. *SIAM/ASA Journal on Uncertainty Quantification*, 2(1):564–584, ???? 2014. CODEN SJUQA3. ISSN 2166-2525.

Gauthier:2014:SAI

[GP14a] Bertrand Gauthier and Luc Pronzato. Spectral approximation of the IMSE criterion for optimal designs in kernel-based interpolation models. *SIAM/ASA Journal on Uncertainty*

Quantification, 2(1):805–825, ???? 2014. CODEN SJUQA3. ISSN 2166-2525.

Gordon:2014:PFD

[GP14b] Andrew Gordon and Catherine E. Powell. A preconditioner for fictitious domain formulations of elliptic PDEs on uncertain parameterized domains. *SIAM/ASA Journal on Uncertainty Quantification*, 2(1):622–646, ???? 2014. CODEN SJUQA3. ISSN 2166-2525.

Gantner:2018:HOQ

[GP18] R. N. Gantner and M. D. Peters. Higher-order quasi-Monte Carlo for Bayesian shape inversion. *SIAM/ASA Journal on Uncertainty Quantification*, 6(2):707–736, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Gong:2024:MBE

[GP24] Xianliang Gong and Yulin Pan. Multifidelity Bayesian experimental design to quantify rare-event statistics. *SIAM/ASA Journal on Uncertainty Quantification*, 12(1):101–127, February 2024. CODEN SJUQA3. ISSN 2166-2525.

Gao:2025:MFG

[GQ25] Yuan Gao and Di Qi. Mean field games for controlling coherent structures in nonlinear fluid systems. *SIAM/ASA Journal on Uncertainty Quantification*, 13(4):1681–1708, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/24M1632231`.

Griebel:2017:RKH

[GR17] Michael Griebel and Christian Rieger. Reproducing kernel Hilbert spaces for parametric partial differential equations. *SIAM/ASA Journal on Uncertainty Quantification*, 5(1):111–137, ???? 2017. CODEN SJUQA3. ISSN 2166-2525.

Greengard:2025:EFR

[GRB25] Philip Greengard, Manas Rachh, and Alex H. Barnett. Equispaced Fourier representations for efficient Gaussian process regression from a billion data points. *SIAM/ASA Journal on Uncertainty Quantification*, 13(1):63–89, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/23M1565310`.

Grigoriu:2014:RSR

[Gri14] M. Grigoriu. Response statistics for random heterogeneous microstructures. *SIAM/ASA Journal on Uncertainty Quantification*, 2(1):252–275, ???? 2014. CODEN SJUQA3. ISSN 2166-2525.

Grigoriu:2016:MMM

[Gri16] M. Grigoriu. Microstructure models and material response by extreme value theory. *SIAM/ASA Journal on Uncertainty Quantification*, 4

(1):190–217, ???? 2016. CODEN SJUQA3. ISSN 2166-2525.

Grigoriu:2017:ESR

[Gri17] M. Grigoriu. Estimates of system response maxima by extreme value theory and surrogate models. *SIAM/ASA Journal on Uncertainty Quantification*, 5(1):922–955, ???? 2017. CODEN SJUQA3. ISSN 2166-2525.

Grigoriu:2024:HNP

[Gri24] Mircea Grigoriu. Harmonizable nonstationary processes. *SIAM/ASA Journal on Uncertainty Quantification*, 12(3):842–867, ???? 2024. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/22M1544580`.

Giles:2022:ANM

[GSM22] Michael Giles and Oliver Sheridan-Methven. Analysis of nested multilevel Monte Carlo using approximate normal random variables. *SIAM/ASA Journal on Uncertainty Quantification*, 10(1):200–226, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/21M1399385`.

Guth:2024:OSL

[GSW24] Philipp A. Guth, Claudia Schillings, and Simon Weissmann. One-shot learning of surrogates in PDE-constrained optimization under uncertainty. *SIAM/ASA Journal on Uncertainty Quantification*, 12(2):614–645, ???? 2024. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/23M1553170`.

Gratton:2014:SCM

[GTP14] Serge Gratton and David Titley-Peloquin. Stochastic conditioning of matrix functions. *SIAM/ASA Journal on Uncertainty Quantification*, 2(1):763–783, ???? 2014. CODEN SJUQA3. ISSN 2166-2525.

Gu:2018:SGS

[GW18] Mengyang Gu and Long Wang. Scaled Gaussian stochastic process for computer model calibration and prediction. *SIAM/ASA Journal on Uncertainty Quantification*, 6(4):1555–1583, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Gu:2022:TFS

[GXW22] Mengyang Gu, Fangzheng Xie, and Long Wang. A theoretical framework of the scaled Gaussian stochastic process in prediction and calibration. *SIAM/ASA Journal on Uncertainty Quantification*, 10(4):1435–1460, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/21M1409949`.

Gao:2024:AOL

[GYZ24] Zhiwei Gao, Liang Yan, and Tao Zhou. Adaptive operator learning for infinite-dimensional Bayesian inverse problems. *SIAM/ASA Journal on Uncertainty Quantification*, 12(4):1389–1423, ???? 2024. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/24M1643815`.

Houssineau:2018:SFC

[HB18] Jeremie Houssineau and Adrian N. Bishop. Smoothing and filtering with a class of outer measures. *SIAM/ASA Journal on Uncertainty Quantification*, 6(2):845–866, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Hobbs:2017:SBU

[HBC+17] Jonathan Hobbs, Amy Braverman, Noel Cressie, Robert Granat, and Michael Gunson. Simulation-based uncertainty quantification for estimating atmospheric CO_2 from satellite data. *SIAM/ASA Journal on Uncertainty Quantification*, 5(1):956–985, ???? 2017. CODEN SJUQA3. ISSN 2166-2525.

Hart:2019:GSA

[HBC19] Joseph L. Hart, Julie Bessac, and Emil M. Constantinescu. Global sensitivity analysis for statistical model parameters. *SIAM/ASA Journal on Uncertainty Quantification*, 7(1):67–92, ???? 2019. CODEN SJUQA3. ISSN 2166-2525.

Haberle:2024:WBD

[HBM24] Konstantin Häberle, Barbara Bravi, and Anthea Monod. Wavelet-based density estimation for persistent homology. *SIAM/ASA Journal on Uncertainty Quantification*, 12(2):347–376, April 2024. CODEN SJUQA3. ISSN 2166-2525.

He:2018:IIG

[HC18] Xu He and Peter Chien. On the instability issue of gradient-enhanced Gaussian process emulators for computer experiments. *SIAM/ASA Journal on Uncertainty Quantification*, 6(2):627–644, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

He:2024:EKU

[He24] Xu He. Efficient kriging using interleaved lattice-based designs with low fill and high separation distance properties. *SIAM/ASA Journal on Uncertainty Quantification*, 12(4):1113–1134, ???? 2024. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/23M156940X`.

Heas:2020:SRM

[Héa20] P. Héas. Selecting reduced models in the cross-entropy method. *SIAM/ASA Journal on Uncertainty Quantification*, 8(2):511–538, ???? 2020. CO-

DEN SJUQA3. ISSN 2166-2525.

Hoang:2025:SMB

[HEKT25] Vinh Hoang, Luis Espath, Sebastian Krumscheid, and Raúl Tempone. Scalable method for Bayesian experimental design without integrating over posterior distribution. *SIAM/ASA Journal on Uncertainty Quantification*, 13(1):114–139, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL https://epubs.siam.org/doi/10.1137/23M1603364.

Hessling:2013:DSP

[Hes13] Jan Peter Hessling. Deterministic sampling for propagating model covariance. *SIAM/ASA Journal on Uncertainty Quantification*, 1(1):297–318, ???? 2013. CODEN SJUQA3. ISSN 2166-2525.

Hessling:2014:ICM

[Hes14] Jan Peter Hessling. Identification of complex models. *SIAM/ASA Journal on Uncertainty Quantification*, 2(1):717–744, ???? 2014. CODEN SJUQA3. ISSN 2166-2525.

Huang:2017:NMS

[HG17] Ya-Ting Huang and James Glimm. A novel methodology of stochastic short term forecasting of cloud boundaries. *SIAM/ASA Journal on Uncertainty Quantification*, 5(1):1279–1294, ???? 2017. CODEN SJUQA3. ISSN 2166-2525.

Hart:2019:RSI

[HG19] Joseph L. Hart and Pierre A. Gremaud. Robustness of the Sobol' indices to marginal distribution uncertainty. *SIAM/ASA Journal on Uncertainty Quantification*, 7(4):1224–1244, ???? 2019. CODEN SJUQA3. ISSN 2166-2525.

Hironaka:2020:MMC

[HGGT20] Tomohiko Hironaka, Michael B. Giles, Takashi Goda, and Howard Thom. Multilevel Monte Carlo estimation of the expected value of sample information. *SIAM/ASA Journal on Uncertainty Quantification*, 8(3):1236–1259, ???? 2020. CODEN SJUQA3. ISSN 2166-2525.

Huan:2025:SIC

[HGK+25] Stephen Huan, Joseph Guinness, Matthias Katzfuss, Houman Owhadi, and Florian Schäofer. Sparse inverse Cholesky factorization of dense kernel matrices by greedy conditional selection. *SIAM/ASA Journal on Uncertainty Quantification*, 13(3):1649–1679, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL https://epubs.siam.org/doi/10.1137/23M1606253.

Heaton:2013:MUC

[HGS13] Matthew J. Heaton, Tamara A. Greasby, and Stephan R. Sain. Modeling uncertainty in climate using ensembles of regional and global climate models and multiple observation-based data sets. *SIAM/ASA Journal on Uncertainty Quantification*, 1(1):535–559, ???? 2013. CODEN SJUQA3. ISSN 2166-2525.

Hagemann:2022:SNF

[HHS22] Paul Hagemann, Johannes Hertrich, and Gabriele Steidl. Stochastic normalizing flows for inverse problems: a Markov chains viewpoint. *SIAM/ASA Journal on Uncertainty Quantification*, 10(3):1162–1190, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/21M1450604`.

Hosseini:2025:COT

[HHT25] Bamdad Hosseini, Alexander W. Hsu, and Amirhossein Taghvaei. Conditional optimal transport on function spaces. *SIAM/ASA Journal on Uncertainty Quantification*, 13(1):304–338, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/23M1618922`.

Herin:2024:PME

[HICI24] Margot Herin, Marouane Il Idrissi, Vincent Chabridon, and Bertrand Iooss. Proportional marginal effects for global sensitivity analysis. *SIAM/ASA Journal on Uncertainty Quantification*, 12(2):667–692, ???? 2024. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/22M153032X`.

Heng:2023:UED

[HJLT23] Jeremy Heng, Ajay Jasra, Kody J. H. Law, and Alexander Tarakanov. On unbiased estimation for discretized models. *SIAM/ASA Journal on Uncertainty Quantification*, 11(2):616–645, ???? 2023. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/21M1460788`.

Hall:2018:RID

[HK18] Eric Joseph Hall and Markos A. Katsoulakis. Robust information divergences for model-form uncertainty arising from sparse data in random PDE. *SIAM/ASA Journal on Uncertainty Quantification*, 6(4):1364–1394, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Han:2024:ACV

[HKL+24] Ruijian Han, Boris Kramer, Dongjin Lee, Akil Narayan, and Yiming Xu. An approximate control variates approach to multifidelity distribution estimation. *SIAM/ASA Journal on Uncertainty Quantification*, 12(4):1349–1388, ???? 2024. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/23M1584307`.

Harbrecht:2024:QDU

[HKS24] Helmut Harbrecht, Viacheslav Karnaev, and Marc Schmidlin.

Quantifying domain uncertainty in linear elasticity. *SIAM/ASA Journal on Uncertainty Quantification*, 12(2): 503–523, May 2024. CODEN SJUQA3. ISSN 2166-2525.

Heinkenschloss:2020:ARO

[HKT20] Matthias Heinkenschloss, Boris Kramer, and Timur Takhtaganov. Adaptive reduced-order model construction for conditional value-at-risk estimation. *SIAM/ASA Journal on Uncertainty Quantification*, 8(2):668–692, ???? 2020. CODEN SJUQA3. ISSN 2166-2525.

Heinkenschloss:2018:CVR

[HKTW18] Matthias Heinkenschloss, Boris Kramer, Timur Takhtaganov, and Karen Willcox. Conditional-value-at-risk estimation via reduced-order models. *SIAM/ASA Journal on Uncertainty Quantification*, 6(4):1395–1423, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Hu:2018:BIFa

[HKZ18a] Grace X. Hu, David R. Kuipers, and Yong Zeng. Bayesian inference via filtering equations for ultrahigh frequency data (I): Model and estimation. *SIAM/ASA Journal on Uncertainty Quantification*, 6 (1):34–60, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Hu:2018:BIFb

[HKZ18b] Grace X. Hu, David R. Kuipers, and Yong Zeng. Bayesian inference via filtering equations for ultrahigh frequency data (II): Model selection. *SIAM/ASA Journal on Uncertainty Quantification*, 6(1): 61–86, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Hyvonen:2015:SGF

[HL15] N. Hyvönen and M. Leinonen. Stochastic Galerkin finite element method with local conductivity basis for electrical impedance tomography. *SIAM/ASA Journal on Uncertainty Quantification*, 3(1):998–1019, ???? 2015. CODEN SJUQA3. ISSN 2166-2525.

Hu:2017:SDR

[HL17] Ruimeng Hu and Mike Ludkovski. Sequential design for ranking response surfaces. *SIAM/ASA Journal on Uncertainty Quantification*, 5(1): 212–239, ???? 2017. CODEN SJUQA3. ISSN 2166-2525.

Hegde:2018:CAM

[HLO+18] Arun Hegde, Wenyu Li, James Oreluk, Andrew Packard, and Michael Frenklach. Consistency analysis for massively inconsistent datasets in bound-to-bound data collaboration. *SIAM/ASA Journal on Uncertainty Quantification*, 6(2):429–456, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Heitzinger:2018:EUC

[HLPR18] Clemens Heitzinger, Michael Leumüller, Gudmund Pammer, and Stefan Rigger. Existence, uniqueness, and a comparison of nonintrusive methods for the stochastic nonlinear Poisson–Boltzmann equation. *SIAM/ ASA Journal on Uncertainty Quantification*, 6(3):1019–1042, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Hooker:2015:CTE

[HLR15] Giles Hooker, Kevin K. Lin, and Bruce Rogers. Control theory and experimental design in diffusion processes. *SIAM/ASA Journal on Uncertainty Quantification*, 3(1):234–264, ???? 2015. CODEN SJUQA3. ISSN 2166-2525.

Hu:2022:GFR

[HLY22] Mengqi Hu, Yifei Lou, and Xiu Yang. A general framework of rotational sparse approximation in uncertainty quantification. *SIAM/ASA Journal on Uncertainty Quantification*, 10(4):1410–1434, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/21M1391602`.

Hung:2020:LID

[HML20] Ying-Chao Hung, George Michailidis, and Horace PakHai Lok. Locating infinite discontinuities in computer experiments. *SIAM/ASA Journal on Uncertainty Quantification*, 8 (2):717–747, ???? 2020. CODEN SJUQA3. ISSN 2166-2525.

Higham:2013:MET

[HMR+13] Desmond J. Higham, Xuerong Mao, Mikolaj Roj, Qingshuo Song, and George Yin. Mean exit times and the multilevel Monte Carlo method. *SIAM/ ASA Journal on Uncertainty Quantification*, 1(1):2–18, ???? 2013. CODEN SJUQA3. ISSN 2166-2525.

Hosseini:2017:WPBa

[HN17] Bamdad Hosseini and Nilima Nigam. Well-posed Bayesian inverse problems: Priors with exponential tails. *SIAM/ASA Journal on Uncertainty Quantification*, 5(1):436–465, ???? 2017. CODEN SJUQA3. ISSN 2166-2525.

Haberstich:2023:ALT

[HNP23] Cécile Haberstich, A. Nouy, and G. Perrin. Active learning of tree tensor networks using optimal least squares. *SIAM/ ASA Journal on Uncertainty Quantification*, 11(3):848–876, ???? 2023. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/21M1415911`.

Han:2025:TTB

[HOL25] Fuqun Han, Stanley Osher, and Wuchen Li. Tensor train based sampling algorithms for approximating regularized Wasserstein proximal operators. *SIAM/ASA Journal on Uncertainty Quantification*, 13(2):775–804, ???? 2025. CODEN SJUQA3.

ISSN 2166-2525. URL https://epubs.siam.org/doi/10.1137/24M1633765.

Hosseini:2017:WPBb

[Hos17] Bamdad Hosseini. Well-posed Bayesian inverse problems with infinitely divisible and heavy-tailed prior measures. *SIAM/ASA Journal on Uncertainty Quantification*, 5(1):1024–1060, ???? 2017. CODEN SJUQA3. ISSN 2166-2525.

Hosseini:2019:TMH

[Hos19] Bamdad Hosseini. Two Metropolis–Hastings algorithms for posterior measures with non-Gaussian priors in infinite dimensions. *SIAM/ASA Journal on Uncertainty Quantification*, 7(4):1185–1223, ???? 2019. CODEN SJUQA3. ISSN 2166-2525.

Horwood:2014:GMD

[HP14] Joshua T. Horwood and Aubrey B. Poore. Gauss von Mises distribution for improved uncertainty realism in space situational awareness. *SIAM/ASA Journal on Uncertainty Quantification*, 2(1):276–304, ???? 2014. CODEN SJUQA3. ISSN 2166-2525.

Halonen:2023:QEG

[HP23] Vilho Halonen and Ilkka Pölönen. Quantification of errors generated by uncertain data in a linear boundary value problem using neural networks. *SIAM/ASA Journal on Uncertainty Quantification*, 11(4):1258–1277, November 2023. CODEN SJUQA3. ISSN 2166-2525.

Hoffmann:2025:RAF

[HP25] Marc Hoffmann and Camille Pouchol. Regularization for the approximation of functions by mollified discretization methods. *SIAM/ASA Journal on Uncertainty Quantification*, 13(3):957–979, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL https://epubs.siam.org/doi/10.1137/24M1678210.

Heitzinger:2018:CFM

[HPR18] Clemens Heitzinger, Gudmund Pammer, and Stefan Rigger. Cubature formulas for multisymmetric functions and applications to stochastic partial differential equations. *SIAM/ASA Journal on Uncertainty Quantification*, 6(1):213–242, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Harbrecht:2016:MAQ

[HPS16] Helmut Harbrecht, Michael Peters, and Markus Siebenmorgen. Multilevel accelerated quadrature for PDEs with log-normally distributed diffusion coefficient. *SIAM/ASA Journal on Uncertainty Quantification*, 4(1):520–551, ???? 2016. CODEN SJUQA3. ISSN 2166-2525.

Hu:2021:UQB

[HPW21] Jingwei Hu, Lorenzo Pareschi, and Yubo Wang. Uncertainty quantification for the BGK model of the Boltzmann equation using multilevel variance reduced Monte Carlo methods. *SIAM/ASA Journal on Uncertainty Quantification*, 9(2):650–680, ???? 2021. CODEN SJUQA3. ISSN 2166-2525.

Hoang:2021:MMC

[HQS21] Viet Ha Hoang, Jia Hao Quek, and Christoph Schwab. Multilevel Markov chain Monte Carlo for Bayesian inversion of parabolic partial differential equations under Gaussian prior. *SIAM/ASA Journal on Uncertainty Quantification*, 9 (2):384–419, ???? 2021. CODEN SJUQA3. ISSN 2166-2525.

Hartmann:2024:NBS

[HR24] Carsten Hartmann and Lorenz Richter. Nonasymptotic bounds for suboptimal importance sampling. *SIAM/ASA Journal on Uncertainty Quantification*, 12(2):309–346, April 2024. CODEN SJUQA3. ISSN 2166-2525.

Hadji:2021:CWT

[HS21] Amine Hadji and Botond Szabó. Can we trust Bayesian uncertainty quantification from Gaussian process priors with squared exponential covariance kernel? *SIAM/ASA Journal on Uncertainty Quantification*, 9(1):185–230, ???? 2021. CODEN SJUQA3. ISSN 2166-2525.

Harlim:2020:KMB

[HSAY20] John Harlim, Daniel Sanz-Alonso, and Ruiyi Yang. Kernel methods for Bayesian elliptic inverse problems on manifolds. *SIAM/ASA Journal on Uncertainty Quantification*, 8 (4):1414–1445, ???? 2020. CODEN SJUQA3. ISSN 2166-2525.

He:2022:ATR

[HSH+22] Yuchen He, Namjoon Suh, Xiaoming Huo, Sung Ha Kang, and Yajun Mei. Asymptotic theory of ℓ_1-regularized PDE identification from a single noisy trajectory. *SIAM/ASA Journal on Uncertainty Quantification*, 10(3):1012–1036, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/21M1398884`.

Huan:2018:CSC

[HSS+18] Xun Huan, Cosmin Safta, Khachik Sargsyan, Zachary P. Vane, Guilhem Lacaze, Joseph C. Oefelein, and Habib N. Najm. Compressive sensing with cross-validation and stop-sampling for sparse polynomial chaos expansions. *SIAM/ASA Journal on Uncertainty Quantification*, 6(2):907–936, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Henrion:2025:OCU

[HSW25] René Henrion, Georg Stadler, and Florian Wechsung. Optimal control under uncertainty with joint chance state constraints: Almost-everywhere bounds, variance reduction, and application to (bi)linear elliptic PDEs. *SIAM/ASA Journal on Uncertainty Quantification*, 13(3):1028–1053, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/24M171557X`.

Herrmann:2019:UQS

[HSZ19] Lukas Herrmann, Christoph Schwab, and Jakob Zech. Uncertainty quantification for spectral fractional diffusion: Sparsity analysis of parametric solutions. *SIAM/ASA Journal on Uncertainty Quantification*, 7(3):913–947, ???? 2019. CODEN SJUQA3. ISSN 2166-2525.

Harmon:2025:AUQ

[HTZS25] Jake J. Harmon, Svetlana Tokareva, Anatoly Zlotnik, and Pieter J. Swart. Adaptive uncertainty quantification for stochastic hyperbolic conservation laws. *SIAM/ASA Journal on Uncertainty Quantification*, 13(2):339–374, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/23M1624750`.

Haasdonk:2013:RBM

[HUW13] Bernard Haasdonk, Karsten Urban, and Bernhard Wieland. Reduced basis methods for parameterized partial differential equations with stochastic influences using the Karhunen–Loève expansion. *SIAM/ASA Journal on Uncertainty Quantification*, 1(1):79–105, ???? 2013. CODEN SJUQA3. ISSN 2166-2525.

Haaland:2018:FCS

[HWM18] Benjamin Haaland, Wenjia Wang, and Vaibhav Maheshwari. A framework for controlling sources of inaccuracy in Gaussian process emulation of deterministic computer experiments. *SIAM/ASA Journal on Uncertainty Quantification*, 6(2):497–521, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Hao:2021:NAO

[HZ21] Zhaopeng Hao and Zhongqiang Zhang. Numerical approximation of optimal convergence for fractional elliptic equations with additive fractional Gaussian noise. *SIAM/ASA Journal on Uncertainty Quantification*, 9(3):1013–1033, ???? 2021. CODEN SJUQA3. ISSN 2166-2525.

Iolov:2017:ODE

[IDL17] Alexandre Iolov, Susanne Ditlevsen, and André Longtin. Optimal design for estimation in diffusion processes from first hitting times. *SIAM/ASA Journal on Uncertainty Quantification*, 5(1):88–110, ???? 2017. CODEN SJUQA3. ISSN 2166-2525.

Iguchi:2025:AMM

[IJMB25] Yuga Iguchi, Ajay Jasra, Mohamed Maama, and Alexandros Beskos. Antithetic multilevel methods for elliptic and hypoelliptic diffusions with applications. *SIAM/ASA Journal on Uncertainty Quantification*, 13(2):805–830, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL https://epubs.siam.org/doi/10.1137/24M1695178.

Ibrahima:2017:MDS

[IT17] Fayadhoi Ibrahima and Hamdi A. Tchelepi. Multipoint distribution of saturation for stochastic nonlinear two-phase transport. *SIAM/ASA Journal on Uncertainty Quantification*, 5 (1):353–377, ???? 2017. CODEN SJUQA3. ISSN 2166-2525.

Iza-Teran:2019:GML

[ITG19] Rodrigo Iza-Teran and Jochen Garcke. A geometrical method for low-dimensional representations of simulations. *SIAM/ASA Journal on Uncertainty Quantification*, 7(2):472–496, ???? 2019. CODEN SJUQA3. ISSN 2166-2525.

Jahn:2023:NLF

[Jah23] Tim Jahn. Noise level free regularization of general linear inverse problems under unconstrained white noise. *SIAM/ASA Journal on Uncertainty Quantification*, 11(2):591–615, ???? 2023. CODEN SJUQA3. ISSN 2166-2525. URL https://epubs.siam.org/doi/10.1137/22M1506675.

Jiang:2016:GOR

[JCN16] Jiahua Jiang, Yanlai Chen, and Akil Narayan. A goal-oriented reduced basis methods-accelerated generalized polynomial chaos algorithm. *SIAM/ASA Journal on Uncertainty Quantification*, 4 (1):1398–1420, ???? 2016. CODEN SJUQA3. ISSN 2166-2525.

Jadamba:2021:COF

[JKS+21] Baasansuren Jadamba, Akhtar A. Khan, Miguel Sama, Hans-Jorg Starkloff, and Christiane Tammer. A convex optimization framework for the inverse problem of identifying a random parameter in a stochastic partial differential equation. *SIAM/ASA Journal on Uncertainty Quantification*, 9(2):922–952, ???? 2021. CODEN SJUQA3. ISSN 2166-2525.

Jimenez:2017:NPC

[JLK17] M. Navarro Jimenez, O. P. Le Maître, and O. M. Knio. Nonintrusive polynomial chaos expansions for sensitivity analysis in stochastic differential equations. *SIAM/ASA Journal on Uncertainty Quantification*, 5 (1):378–402, ???? 2017. CODEN SJUQA3. ISSN 2166-2525.

Joseph:2024:DUF

[JLYM24] V. Roshan Joseph, William E. Lewis, Henry S. Yuchi, and Kathryn A. Maupin. Discovering the unknowns: a first step. *SIAM/ASA Journal on Uncertainty Quantification*, 12(4):1336–1348, ???? 2024. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/23M159874X`.

Jin:2013:OIS

[JM13] Qinian Jin and Peter Mathé. Oracle inequality for a statistical Raus–Gfrerer-type rule. *SIAM/ASA Journal on Uncertainty Quantification*, 1(1):386–407, ???? 2013. CODEN SJUQA3. ISSN 2166-2525.

Jin:2025:SCA

[JQZ25] Bangti Jin, Qimeng Quan, and Wenlong Zhang. Stochastic convergence analysis of the inverse potential problem. *SIAM/ASA Journal on Uncertainty Quantification*, 13 (3):1334–1373, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/24M1703422`.

Jentzen:2025:NCG

[JR25] Arnulf Jentzen and Adrian Riekert. Non-convergence to global minimizers for Adam and stochastic gradient descent optimization and constructions of local minimizers in the training of artificial neural networks. *SIAM/ASA Journal on Uncertainty Quantification*, 13(3):1294–1333, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/24M1639464`.

Jahnke:2022:MSC

[JS22] Tobias Jahnke and Benny Stein. A multilevel stochastic collocation method for Schrödinger equations with a random potential. *SIAM/ASA Journal on Uncertainty Quantification*, 10(4):1753–1780, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/21M1440517`.

Jarman:2013:CCS

[JT13] K. D. Jarman and A. M. Tartakovsky. A comparison of closures for stochastic advection-diffusion equations. *SIAM/ASA Journal on Uncertainty Quantification*, 1(1):319–347, ???? 2013. CODEN SJUQA3. ISSN 2166-2525. See erratum [JT15].

Jarman:2015:ECC

[JT15] K. D. Jarman and A. M. Tartakovsky. Erratum: A Comparison of Closures for Stochastic Advection-Diffusion Equations. *SIAM/ASA Journal on Uncertainty Quantification*, 3(1):265–266, ???? 2015. CODEN SJUQA3. ISSN 2166-2525. See [JT13].

Ji:2024:CMF

[JYS+24] Yi Ji, Henry Shaowu Yuchi, Derek Soeder, J.-F. Paquet, Steffen A. Bass, V. Roshan Joseph, C. F. Jeff Wu, and Simon Mak. Conglomerate multi-fidelity Gaussian process modeling, with application to heavy-ion collisions. *SIAM/ASA Journal on Uncertainty Quantification*, 12(2):473–502, May 2024. CODEN SJUQA3. ISSN 2166-2525.

Jin:2021:SPS

[JZZ21] Bangti Jin, Zehui Zhou, and Jun Zou. On the saturation phenomenon of stochastic gradient descent for linear inverse problems. *SIAM/ASA Journal on Uncertainty Quantification*, 9(4):1553–1588, ???? 2021. CODEN SJUQA3. ISSN 2166-2525.

Karvonen:2023:ABS

[Kar23] Toni Karvonen. Asymptotic bounds for smoothness parameter estimates in Gaussian process interpolation. *SIAM/ASA Journal on Uncertainty Quantification*, 11(4):1225–1257, November 2023. CODEN SJUQA3. ISSN 2166-2525.

Kantas:2014:SMC

[KBJ14] Nikolas Kantas, Alexandros Beskos, and Ajay Jasra. Sequential Monte Carlo methods for high-dimensional inverse problems: a case study for the Navier–Stokes equations. *SIAM/ASA Journal on Uncertainty Quantification*, 2(1):464–489, ???? 2014. CODEN SJUQA3. ISSN 2166-2525.

Kenz:2013:CFB

[KBS13] Zackary R. Kenz, H. T. Banks, and Ralph C. Smith. Comparison of frequentist and Bayesian confidence analysis methods on a viscoelastic stenosis model. *SIAM/ASA Journal on Uncertainty Quantification*, 1(1):348–369, ???? 2013. CODEN SJUQA3. ISSN 2166-2525.

Kyzyurova:2018:CCM

[KBW18] Ksenia N. Kyzyurova, James O. Berger, and Robert L. Wolpert. Coupling computer models through linking their statistical emulators. *SIAM/ASA Journal on Uncertainty Quantification*, 6(3):1151–1171, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Kerleguer:2023:MSM

[Ker23] Baptiste Kerleguer. Multifidelity surrogate modeling for time-series outputs. *SIAM/ASA Journal on Uncertainty Quantification*, 11(2):514–539, ???? 2023. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/20M1386694`.

Katzfuss:2022:SVA

[KGL22] Matthias Katzfuss, Joseph Guinness, and Earl Lawrence. Scaled Vecchia approximation for fast computer-model emulation. *SIAM/ASA Journal on Uncertainty Quantification*, 10(2):537–554, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/20M1352156`.

Kang:2016:KAR

[KJ16] Lulu Kang and V. Roshan Joseph. Kernel approximation: From regression to interpolation. *SIAM/ASA Journal on Uncertainty Quantification*, 4 (1):112–129, ???? 2016. CODEN SJUQA3. ISSN 2166-2525.

Kouri:2022:RAO

[KJH22] Drew P. Kouri, John D. Jakeman, and J. Gabriel Huerta. Risk-adapted optimal experimental design. *SIAM/ASA Journal on Uncertainty Quantification*, 10(2):687–716, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/20M1357615`.

Kressner:2015:LRT

[KKNT15] Daniel Kressner, Rajesh Kumar, Fabio Nobile, and Christine Tobler. Low-rank tensor approximation for high-order correlation functions of Gaussian random fields. *SIAM/ASA Journal on Uncertainty Quantification*, 3(1):393–416, ???? 2015. CODEN SJUQA3. ISSN 2166-2525.

Kielstra:2025:GBD

[KL25] P. Michael Kielstra and Michael Lindsey. A gradient-based and determinant-free framework for fully Bayesian Gaussian process regression. *SIAM/ASA Journal on Uncertainty Quantification*, 13(4):1709–1734, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/25M1724833`.

Kahle:2019:BPI

[KLLU19] Christian Kahle, Kei Fong Lam, Jonas Latz, and Elisabeth Ullmann. Bayesian parameter identification in Cahn–Hilliard models for biological growth. *SIAM/ASA Journal on Uncertainty Quantification*, 7(2):526–552, ???? 2019. CODEN SJUQA3. ISSN 2166-2525.

Kovacs:2015:WCF

[KLS15] Mihály Kovács, Felix Lindner, and René L. Schilling. Weak convergence of finite element approximations of linear stochastic evolution equations with additive Lévy noise. *SIAM/ASA Journal on Uncertainty Quantification*, 3(1):1159–1199, ???? 2015. CODEN SJUQA3. ISSN 2166-2525.

Kwiatkowski:2015:CSR

[KM15] Evan Kwiatkowski and Jan Mandel. Convergence of the square root ensemble Kalman filter in the large ensemble limit. *SIAM/ASA Journal on*

Uncertainty Quantification, 3 (1):1–17, ???? 2015. CODEN SJUQA3. ISSN 2166-2525.

Kohler:2014:CPA

[KMW14] Dominic Kohler, Johannes Müller, and Utz Wever. Cellular probabilistic automata — a novel method for uncertainty propagation. *SIAM/ASA Journal on Uncertainty Quantification*, 2(1):29–54, ???? 2014. CODEN SJUQA3. ISSN 2166-2525.

Krumscheid:2018:MMC

[KN18] S. Krumscheid and F. Nobile. Multilevel Monte Carlo approximation of functions. *SIAM/ ASA Journal on Uncertainty Quantification*, 6(3):1256–1293, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Kim:2025:SLF

[KOPS25] Minji Kim, Kevin O'Connor, Vladas Pipiras, and Themistoklis Sapsis. Sampling low-fidelity outputs for estimation of high-fidelity density and its tails. *SIAM/ASA Journal on Uncertainty Quantification*, 13(1):30–62, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/24M1639142`.

Kouri:2014:MSC

[Kou14] D. P. Kouri. A multilevel stochastic collocation algorithm for optimization of PDEs with uncertain coefficients. *SIAM/ASA Journal on Uncertainty Quantification*, 2 (1):55–81, ???? 2014. CODEN SJUQA3. ISSN 2166-2525.

Kamilis:2018:UQL

[KP18] Dimitris Kamilis and Nick Polydorides. Uncertainty quantification for low-frequency, time-harmonic Maxwell equations with stochastic conductivity models. *SIAM/ASA Journal on Uncertainty Quantification*, 6(4):1295–1334, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Kubinova:2020:BPS

[KP20] Marie Kubínová and Ivana Pultarová. Block preconditioning of stochastic Galerkin problems: New two-sided guaranteed spectral bounds. *SIAM/ ASA Journal on Uncertainty Quantification*, 8(1):88–113, ???? 2020. CODEN SJUQA3. ISSN 2166-2525.

Klein:2022:TCS

[KPR22] Thierry Klein, Nicolas Peteilh, and Paul Rochet. Test comparison for Sobol indices over nested sets of variables. *SIAM/ASA Journal on Uncertainty Quantification*, 10 (4):1586–1600, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/21M1457370`.

Kretschmann:2023:MOM

[Kre23] Remo Kretschmann. Are minimizers of the Onsager–Machlup functional strong posterior modes? *SIAM/ASA Journal on Uncertainty Quantification*, 11(4):1105–1138, ???? 2023. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/23M1546579`.

Koley:2021:MMC

[KRS21] Ujjwal Koley, Deep Ray, and Tanmay Sarkar. Multilevel Monte Carlo finite difference methods for fractional conservation laws with random data. *SIAM/ASA Journal on Uncertainty Quantification*, 9(1):65–105, ???? 2021. CODEN SJUQA3. ISSN 2166-2525.

Kunoth:2016:SAT

[KS16] Angela Kunoth and Christoph Schwab. Sparse adaptive tensor Galerkin approximations of stochastic PDE-constrained control problems. *SIAM/ASA Journal on Uncertainty Quantification*, 4(1):1034–1059, ???? 2016. CODEN SJUQA3. ISSN 2166-2525.

Kouri:2018:EOC

[KS18] D. P. Kouri and T. M. Surowiec. Existence and optimality conditions for risk-averse PDE-constrained optimization. *SIAM/ASA Journal on Uncertainty Quantification*, 6(2):787–815, ???? 2018. CODEN SJUQA3. ISSN 2166-2525. See corrigendum [KS22].

Kouri:2022:CEO

[KS22] Drew P. Kouri and Thomas M. Surowiec. Corrigendum: Existence and optimality conditions for risk-averse PDE-constrained optimization. *SIAM/ASA Journal on Uncertainty Quantification*, 10(3):1321–1322, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/21M143251X`. See [KS18].

Kim:2025:EGP

[KSA25] Hwanwoo Kim and Daniel Sanz-Alonso. Enhancing Gaussian process surrogates for optimization and posterior approximation via random exploration. *SIAM/ASA Journal on Uncertainty Quantification*, 13(3):1054–1084, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/24M1677009`.

Khristenko:2019:ABE

[KSS+19] U. Khristenko, L. Scarabosio, P. Swierczynski, E. Ullmann, and B. Wohlmuth. Analysis of boundary effects on PDE-Based sampling of Whittle–Matérn random fields. *SIAM/ASA Journal on Uncertainty Quantification*, 7(3):948–974, ???? 2019. CODEN SJUQA3. ISSN 2166-2525.

Kleiber:2014:MCD

[KSW14] William Kleiber, Stephan R. Sain, and Michael J. Wiltberger. Model calibration via deformation. *SIAM/ASA Journal on Uncertainty Quantification*, 2(1):545–563, ???? 2014.

CODEN SJUQA3. ISSN 2166-2525.

Kuehn:2015:NCS

[Kue15] Christian Kuehn. Numerical continuation and SPDE stability for the 2D cubic-quintic Allen–Cahn equation. *SIAM/ASA Journal on Uncertainty Quantification*, 3(1):762–789, ???? 2015. CODEN SJUQA3. ISSN 2166-2525.

Ko:2016:AMQ

[KW16] Jordan Ko and Henry P. Wynn. The algebraic method in quadrature for uncertainty quantification. *SIAM/ASA Journal on Uncertainty Quantification*, 4(1):331–357, ???? 2016. CODEN SJUQA3. ISSN 2166-2525.

Kow:2025:CBI

[KW25] Pu-Zhao Kow and Jenn-Nan Wang. Consistency of Bayesian inference for a subdiffusion equation. *SIAM/ASA Journal on Uncertainty Quantification*, 13(3):1116–1144, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/24M1707419`.

Karvonen:2020:MLE

[KWT+20] Toni Karvonen, George Wynne, Filip Tronarp, Chris Oates, and Simo Särkkä. Maximum likelihood estimation and uncertainty quantification for Gaussian process approximation of deterministic functions. *SIAM/ASA Journal on Uncertainty Quantification*, 8(3):926–958, ???? 2020. CODEN SJUQA3. ISSN 2166-2525.

Laszlo:2016:CEP

[Lás16] András László. Convergence and error propagation results on a linear iterative unfolding method. *SIAM/ASA Journal on Uncertainty Quantification*, 4(1):1345–1371, ???? 2016. CODEN SJUQA3. ISSN 2166-2525.

Latz:2020:WPB

[Lat20] Jonas Latz. On the well-posedness of Bayesian inverse problems. *SIAM/ASA Journal on Uncertainty Quantification*, 8(1):451–482, ???? 2020. CODEN SJUQA3. ISSN 2166-2525.

Lee:2018:SLS

[LCE18] Kookjin Lee, Kevin Carlberg, and Howard C. Elman. Stochastic least-squares Petrov–Galerkin method for parameterized linear systems. *SIAM/ASA Journal on Uncertainty Quantification*, 6(1):374–396, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

LeGratiet:2014:BAG

[LCI14] Loic Le Gratiet, Claire Cannamela, and Bertrand Iooss. A Bayesian approach for global sensitivity analysis of (multifidelity) computer codes. *SIAM/ASA Journal on Uncertainty Quantification*, 2(1):336–363,

???? 2014. CODEN SJUQA3. ISSN 2166-2525.

Lykkegaard:2023:MDA

[LDF+23] M. B. Lykkegaard, T. J. Dodwell, C. Fox, G. Mingas, and R. Scheichl. Multilevel delayed acceptance MCMC. *SIAM/ASA Journal on Uncertainty Quantification*, 11(1):1–30, ???? 2023. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/22M1476770`.

LeGratiet:2013:BAH

[Le 13] Loic Le Gratiet. Bayesian analysis of hierarchical multifidelity codes. *SIAM/ASA Journal on Uncertainty Quantification*, 1(1):244–269, ???? 2013. CODEN SJUQA3. ISSN 2166-2525.

Lee:2019:MAS

[Lee19] Minyong R. Lee. Modified active subspaces using the average of gradients. *SIAM/ASA Journal on Uncertainty Quantification*, 7(1):53–66, ???? 2019. CODEN SJUQA3. ISSN 2166-2525.

Lee:2019:LRS

[LES19] Kookjin Lee, Howard C. Elman, and Bedrich Sousedík. A low-rank solver for the Navier–Stokes equations with uncertain viscosity. *SIAM/ASA Journal on Uncertainty Quantification*, 7(4):1275–1300, ???? 2019. CODEN SJUQA3. ISSN 2166-2525.

Labovsky:2014:EAM

[LG14] A. Labovsky and Max Gunzburger. An efficient and accurate method for the identification of the most influential random parameters appearing in the input data for PDEs. *SIAM/ASA Journal on Uncertainty Quantification*, 2(1):82–105, ???? 2014. CODEN SJUQA3. ISSN 2166-2525.

Liu:2017:DRG

[LG17] Xiaoyu Liu and Serge Guillas. Dimension reduction for Gaussian process emulation: an application to the influence of bathymetry on tsunami heights. *SIAM/ASA Journal on Uncertainty Quantification*, 5(1):787–812, ???? 2017. CODEN SJUQA3. ISSN 2166-2525.

Li:2021:RMD

[LHO+21] Wenyu Li, Arun Hegde, James Oreluk, Andrew Packard, and Michael Frenklach. Representing model discrepancy in bound-to-bound data collaboration. *SIAM/ASA Journal on Uncertainty Quantification*, 9(1):231–259, ???? 2021. CODEN SJUQA3. ISSN 2166-2525.

Liu:2024:PFO

[LJ24] Ningxin Liu and Lijian Jiang. Perron–Frobenius operator filter for stochastic dynamical systems. *SIAM/ASA Journal on Uncertainty Quantification*, 12(1):182–211, March

2024. CODEN SJUQA3. ISSN 2166-2525.

Li:2022:NTS

[LK22] Moyan Li and Raed Kontar. On negative transfer and structure of latent functions in multioutput Gaussian processes. *SIAM/ASA Journal on Uncertainty Quantification*, 10(4):1714–1732, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL https://epubs.siam.org/doi/10.1137/21M1436816.

Lopez-Lopera:2018:FDG

[LLBDR18] Andrés F. López-Lopera, François Bachoc, Nicolas Durrande, and Olivier Roustant. Finite-dimensional Gaussian approximation with linear inequality constraints. *SIAM/ASA Journal on Uncertainty Quantification*, 6(3):1224–1255, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Li:2020:SAB

[LLS20] Qin Li, Jian-Guo Liu, and Ruiwen Shu. Sensitivity analysis of Burgers' equation with shocks. *SIAM/ASA Journal on Uncertainty Quantification*, 8 (4):1493–1521, ???? 2020. CODEN SJUQA3. ISSN 2166-2525.

Lan:2022:SBU

[LLS22] Shiwei Lan, Shuyi Li, and Babak Shahbaba. Scaling up Bayesian uncertainty quantification for inverse problems using deep neural networks. *SIAM/ASA Journal on Uncertainty Quantification*, 10(4):1684–1713, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL https://epubs.siam.org/doi/10.1137/21M1439456.

Liu:2017:QAG

[LLSS17] Dishi Liu, Alexander Litvinenko, Claudia Schillings, and Volker Schulz. Quantification of airfoil geometry-induced aerodynamic uncertainties — comparison of approaches. *SIAM/ASA Journal on Uncertainty Quantification*, 5(1):334–352, ???? 2017. CODEN SJUQA3. ISSN 2166-2525.

Luthen:2021:SPC

[LMS21] Nora Lüthen, Stefano Marelli, and Bruno Sudret. Sparse polynomial chaos expansions: Literature survey and benchmark. *SIAM/ASA Journal on Uncertainty Quantification*, 9(2):593–649, ???? 2021. CODEN SJUQA3. ISSN 2166-2525.

Lu:2021:ARL

[LNW21] Shuai Lu, Pingping Niu, and Frank Werner. On the asymptotical regularization for linear inverse problems in presence of white noise. *SIAM/ASA Journal on Uncertainty Quantification*, 9(1):1–28, ???? 2021. CODEN SJUQA3. ISSN 2166-2525.

Liu:2024:SCS

[LQ24] Liu Liu and Kunlun Qi. Spectral convergence of a semidiscretized numerical system for the spatially homogeneous Boltzmann equation with uncertainties. *SIAM/ASA Journal on Uncertainty Quantification*, 12(3):812–841, ???? 2024. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/24M1638483`.

Lee:2018:IMS

[LS18] Kookjin Lee and Bedrich Sousedík. Inexact methods for symmetric stochastic eigenvalue problems. *SIAM/ASA Journal on Uncertainty Quantification*, 6(4):1744–1776, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Lambley:2023:OTP

[LS23] Hefin Lambley and T. J. Sullivan. An order-theoretic perspective on modes and maximum a posteriori estimation in Bayesian inverse problems. *SIAM/ASA Journal on Uncertainty Quantification*, 11(4): 1195–1224, October 2023. CODEN SJUQA3. ISSN 2166-2525.

Luo:2024:MCC

[LS24] Hengrui Luo and Justin D. Strait. Multiple closed curve modeling with uncertainty quantification for shape analysis. *SIAM/ASA Journal on Uncertainty Quantification*, 12 (4):1192–1212, ???? 2024. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/23M1590287`.

Lie:2018:RFM

[LST18] H. C. Lie, T. J. Sullivan, and A. L. Teckentrup. Random forward models and log-likelihoods in Bayesian inverse problems. *SIAM/ASA Journal on Uncertainty Quantification*, 6(4):1600–1629, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Lu:2017:GAP

[LSW17] Yulong Lu, Andrew Stuart, and Hendrik Weber. Gaussian approximations for probability measures on R^d. *SIAM/ASA Journal on Uncertainty Quantification*, 5(1):1136–1165, ???? 2017. CODEN SJUQA3. ISSN 2166-2525.

Lucini:2021:MEE

[LvLP21] María Magdalena Lucini, Peter Jan van Leeuwen, and Manuel Pulido. Model error estimation using the expectation maximization algorithm and a particle flow filter. *SIAM/ASA Journal on Uncertainty Quantification*, 9(2):681–707, ???? 2021. CODEN SJUQA3. ISSN 2166-2525.

Li:2017:URL

[LW17] Qin Li and Li Wang. Uniform regularity for linear kinetic equations with random input based on hypocoercivity. *SIAM/ASA Journal on Uncertainty Quantification*, 5(1):

1193–1219, ???? 2017. CODEN SJUQA3. ISSN 2166-2525.

Li:2022:IRS

[LW22] Peijun Li and Xu Wang. An inverse random source problem for the biharmonic wave equation. *SIAM/ASA Journal on Uncertainty Quantification*, 10(3):949–974, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/21M1429138`.

Li:2024:DEC

[LWY24] Qin Li, Li Wang, and Yunan Yang. Differential equation-constrained optimization with stochasticity. *SIAM/ASA Journal on Uncertainty Quantification*, 12(2):524–548, ???? 2024. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/23M1571162`.

Lindsey:2022:EMC

[LWZ22] Michael Lindsey, Jonathan Weare, and Anna Zhang. Ensemble Markov chain Monte Carlo with teleporting walkers. *SIAM/ASA Journal on Uncertainty Quantification*, 10(3):860–885, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/21M1425062`.

Li:2023:SAQ

[LY23] Yao Li and Yaping Yuan. Sensitivity analysis of quasi-stationary distributions (QSDs) of mass-action systems. *SIAM/ASA Journal on Uncertainty Quantification*, 11(4):1164–1194, October 2023. CODEN SJUQA3. ISSN 2166-2525.

Li:2025:GOA

[LYC25] Wenlong Li, Jian-Feng Yang, and Peter Chien. Grouped orthogonal arrays for computer experiments with grouped inputs. *SIAM/ASA Journal on Uncertainty Quantification*, 13(4):1791–1811, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/25M1741960`.

Li:2024:PIB

[LYW24] Zhaohui Li, Shihao Yang, and C. F. Jeff Wu. Parameter inference based on Gaussian processes informed by nonlinear partial differential equations. *SIAM/ASA Journal on Uncertainty Quantification*, 12(3):964–1004, ???? 2024. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/22M1514131`.

Lv:2023:FCC

[LYWD23] Shurui Lv, Jun Yu, Yan Wang, and Jiang Du. Fast calibration for computer models with massive physical observations. *SIAM/ASA Journal on Uncertainty Quantification*, 11(3):1069–1104, ???? 2023. CODEN SJUQA3. ISSN 2166-2525. URL `https:`

//epubs.siam.org/doi/10.1137/22M153673X.

Law:2022:SOV

[LZ22] Kody J. H. Law and Vitaly Zankin. Sparse online variational Bayesian regression. *SIAM/ASA Journal on Uncertainty Quantification*, 10(3):1070–1100, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL https://epubs.siam.org/doi/10.1137/21M1401188.

Ma:2020:OBA

[Ma20] Pulong Ma. Objective Bayesian analysis of a cokriging model for hierarchical multifidelity codes. *SIAM/ASA Journal on Uncertainty Quantification*, 8(4):1358–1382, ???? 2020. CODEN SJUQA3. ISSN 2166-2525.

Mazo:2021:TBE

[Maz21] Gildas Mazo. A trade-off between explorations and repetitions for estimators of two global sensitivity indices in stochastic models induced by probability measures. *SIAM/ASA Journal on Uncertainty Quantification*, 9(4):1673–1713, ???? 2021. CODEN SJUQA3. ISSN 2166-2525.

Mohammadi:2024:ECD

[MCG24] Hossein Mohammadi, Peter Challenor, and Marc Goodfellow. Emulating complex dynamical simulators with random Fourier features. *SIAM/ASA Journal on Uncertainty Quantification*, 12(3):788–811, ???? 2024. CODEN SJUQA3. ISSN 2166-2525. URL https://epubs.siam.org/doi/10.1137/22M147339X.

Madrigal-Cianci:2023:ACM

[MCNT23] Juan P. Madrigal-Cianci, Fabio Nobile, and Raúl Tempone. Analysis of a class of multilevel Markov chain Monte Carlo algorithms based on independent Metropolis–Hastings. *SIAM/ASA Journal on Uncertainty Quantification*, 11(1):91–138, ???? 2023. CODEN SJUQA3. ISSN 2166-2525. URL https://epubs.siam.org/doi/10.1137/21M1420927.

Mittal:2016:FUP

[MCTI16] A. Mittal, X. Chen, C. H. Tong, and G. Iaccarino. A flexible uncertainty propagation framework for general multiphysics systems. *SIAM/ASA Journal on Uncertainty Quantification*, 4(1):218–243, ???? 2016. CODEN SJUQA3. ISSN 2166-2525.

Mohammadi:2022:CVB

[MCWG22] Hossein Mohammadi, Peter Challenor, Daniel Williamson, and Marc Goodfellow. Cross-Validation–based adaptive sampling for Gaussian process models. *SIAM/ASA Journal on Uncertainty Quantification*, 10(1):294–316, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL https://epubs.siam.org/doi/10.1137/21M1404260.

Mycek:2019:MMC

[MD19] Paul Mycek and Matthias De Lozzo. Multilevel Monte Carlo covariance estimation for the computation of Sobol' indices. *SIAM/ASA Journal on Uncertainty Quantification*, 7(4): 1323–1348, ???? 2019. CODEN SJUQA3. ISSN 2166-2525.

Moosmuller:2020:GAT

[MDK20] Caroline Moosmüller, Felix Dietrich, and Ioannis G. Kevrekidis. A geometric approach to the transport of discontinuous densities. *SIAM/ ASA Journal on Uncertainty Quantification*, 8(3):1012–1035, ???? 2020. CODEN SJUQA3. ISSN 2166-2525.

Ming:2021:LGP

[MG21] Deyu Ming and Serge Guillas. Linked Gaussian process emulation for systems of computer models using Matérn kernels and adaptive design. *SIAM/ ASA Journal on Uncertainty Quantification*, 9(4):1615–1642, ???? 2021. CODEN SJUQA3. ISSN 2166-2525.

Marmin:2018:WGP

[MGBL18] Sébastien Marmin, David Ginsbourger, Jean Baccou, and Jacques Liandrat. Warped Gaussian processes and derivative-based sequential designs for functions with heterogeneous variations. *SIAM/ASA Journal on Uncertainty Quantification*, 6(3):991–1018, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Milz:2023:REE

[Mil23] Johannes Milz. Reliable error estimates for optimal control of linear elliptic PDEs with random inputs. *SIAM/ASA Journal on Uncertainty Quantification*, 11(4):1139–1163, October 2023. CODEN SJUQA3. ISSN 2166-2525.

Minh:2022:FSA

[Min22] Hà Quang Minh. Finite sample approximations of exact and entropic Wasserstein distances between covariance operators and Gaussian processes. *SIAM/ ASA Journal on Uncertainty Quantification*, 10(1):96–124, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL https://epubs.siam.org/doi/10.1137/21M1410488.

Murray:2013:DSS

[MJP13] Lawrence M. Murray, Emlyn M. Jones, and John Parslow. On disturbance state-space models and the particle marginal Metropolis–Hastings sampler. *SIAM/ASA Journal on Uncertainty Quantification*, 1(1):494–521, ???? 2013. CODEN SJUQA3. ISSN 2166-2525.

Matsuda:2021:EOD

[MM21] Takeru Matsuda and Yuto Miyatake. Estimation of ordinary differential equation models with discretization error quantification. *SIAM/ASA*

Journal on Uncertainty Quantification, 9(1):302–331, ???? 2021. CODEN SJUQA3. ISSN 2166-2525.

Malenova:2016:SSC

[MMRT16] G. Malenova, M. Motamed, O. Runborg, and R. Tempone. A sparse stochastic collocation technique for high-frequency wave propagation with uncertainty. *SIAM/ASA Journal on Uncertainty Quantification*, 4 (1):1084–1110, ???? 2016. CODEN SJUQA3. ISSN 2166-2525.

Martin:2021:PCO

[MN21] Matthieu Martin and Fabio Nobile. PDE-constrained optimal control problems with uncertain parameters using SAGA. *SIAM/ASA Journal on Uncertainty Quantification*, 9(3):979–1012, ???? 2021. CODEN SJUQA3. ISSN 2166-2525.

Morrison:2018:RMI

[MOM18] Rebecca E. Morrison, Todd A. Oliver, and Robert D. Moser. Representing model inadequacy: a stochastic operator approach. *SIAM/ASA Journal on Uncertainty Quantification*, 6(2):457–496, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Morris:2018:DFM

[Mor18] Max D. Morris. Decomposing functional model inputs for variance-based sensitivity analysis. *SIAM/ASA Journal on Uncertainty Quantification*, 6 (4):1584–1599, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Motamed:2019:FSP

[Mot19] Mohammad Motamed. Fuzzy-stochastic partial differential equations. *SIAM/ASA Journal on Uncertainty Quantification*, 7(3):1076–1104, ???? 2019. CODEN SJUQA3. ISSN 2166-2525.

Manzoni:2016:ASB

[MPL16] A. Manzoni, S. Pagani, and T. Lassila. Accurate solution of Bayesian inverse uncertainty quantification problems combining reduced basis methods and reduction error models. *SIAM/ASA Journal on Uncertainty Quantification*, 4(1): 380–412, ???? 2016. CODEN SJUQA3. ISSN 2166-2525.

Mukherjee:2020:OCB

[MRS+20] Arpan Mukherjee, Rahul Rai, Puneet Singla, Tarunraj Singh, and Abani Patra. Overlapping clustering based technique for scalable uncertainty quantification in physical systems. *SIAM/ASA Journal on Uncertainty Quantification*, 8(3):827–859, ???? 2020. CODEN SJUQA3. ISSN 2166-2525.

Mishra:2016:NSS

[MRST16] Siddhartha Mishra, Nils Henrik Risebro, Christoph Schwab, and Svetlana Tokareva. Numerical solution of scalar conservation laws with random flux functions. *SIAM/ASA Journal on Uncertainty Quantification*, 4(1):552–591, ???? 2016. CODEN SJUQA3. ISSN 2166-2525.

Mohamad:2015:PDE

[MS15] Mustafa A. Mohamad and Themistoklis P. Sapsis. Probabilistic description of extreme events in intermittently unstable dynamical systems excited by correlated stochastic processes. *SIAM/ASA Journal on Uncertainty Quantification*, 3 (1):709–736, ???? 2015. CODEN SJUQA3. ISSN 2166-2525.

Mai:2017:SMO

[MS17] Chu V. Mai and Bruno Sudret. Surrogate models for oscillatory systems using sparse polynomial chaos expansions and stochastic time warping. *SIAM/ASA Journal on Uncertainty Quantification*, 5(1):540–571, ???? 2017. CODEN SJUQA3. ISSN 2166-2525.

Mignolet:2020:CPC

[MS20] Marc Mignolet and Christian Soize. Compressed principal component analysis of non-Gaussian vectors. *SIAM/ASA Journal on Uncertainty Quantification*, 8(4):1261–1286, ???? 2020. CODEN SJUQA3. ISSN 2166-2525.

Mueller:2025:PCS

[MSDN25] Joy N. Mueller, Khachik Sargsyan, Craig J. Daniels, and Habib N. Najm. Polynomial chaos surrogate construction for random fields with parametric uncertainty. *SIAM/ASA Journal on Uncertainty Quantification*, 13(1):1–29, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/23M1613505`.

Mohan:2014:VMA

[MSDO14] J. Jagalur Mohan, O. Sahni, A. Doostan, and A. A. Oberai. Variational multiscale analysis: The fine-scale Green's function for stochastic partial differential equations. *SIAM/ASA Journal on Uncertainty Quantification*, 2(1):397–422, ???? 2014. CODEN SJUQA3. ISSN 2166-2525.

Montagna:2016:CEN

[MT16] S. Montagna and S. T. Tokdar. Computer emulation with nonstationary Gaussian processes. *SIAM/ASA Journal on Uncertainty Quantification*, 4(1):26–47, ???? 2016. CODEN SJUQA3. ISSN 2166-2525.

Muller:2019:BPC

[MUL19] Christopher Müller, Sebastian Ullmann, and Jens Lang. A Bramble–Pasciak conjugate gradient method for discrete Stokes equations with random viscosity. *SIAM/ASA Journal on Uncertainty Quantification*, 7(3):787–805, ???? 2019. CODEN SJUQA3. ISSN 2166-2525.

Minunno:2013:SPB

[MvOCP13] F. Minunno, M. van Oijen, D. R. Cameron, and J. S. Pereira. Selecting parameters for Bayesian calibration of a process-based model: a methodology based on canonical correlation analysis. *SIAM/ ASA Journal on Uncertainty Quantification*, 1(1):370–385, ???? 2013. CODEN SJUQA3. ISSN 2166-2525.

Mahmood:2015:PBE

[MWP15] Asif Mahmood, Robert L. Wolpert, and E. Bruce Pitman. A physics-based emulator for the simulation of geophysical mass flows. *SIAM/ASA Journal on Uncertainty Quantification*, 3(1):562–585, ???? 2015. CODEN SJUQA3. ISSN 2166-2525.

Nanty:2016:SMS

[NHM+16] Simon Nanty, Céline Helbert, Amandine Marrel, Nadia Pérot, and Clémentine Prieur. Sampling, metamodeling, and sensitivity analysis of numerical simulators with functional stochastic inputs. *SIAM/ASA Journal on Uncertainty Quantification*, 4(1):636–659, ???? 2016. CODEN SJUQA3. ISSN 2166-2525.

Naslidnyk:2025:CSP

[NKKM25] Masha Naslidnyk, Motonobu Kanagawa, Toni Karvonen, and Maren Mahsereci. Comparing scale parameter estimators for Gaussian process interpolation with the Brownian motion prior: Leave-one-out cross validation and maximum likelihood. *SIAM/ ASA Journal on Uncertainty Quantification*, 13(2):679–717, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/23M1586884`.

Newsum:2017:ERB

[NP17] Craig J. Newsum and Catherine E. Powell. Efficient reduced basis methods for saddle point problems with applications in groundwater flow. *SIAM/ASA Journal on Uncertainty Quantification*, 5(1):1248–1278, ???? 2017. CODEN SJUQA3. ISSN 2166-2525.

Nusken:2019:CSS

[NP19] N. Nüsken and G. A. Pavliotis. Constructing sampling schemes via coupling: Markov semigroups and optimal transport. *SIAM/ASA Journal on Uncertainty Quantification*, 7 (1):324–382, ???? 2019. CODEN SJUQA3. ISSN 2166-2525.

Nane:2018:ASI

[NT18] Erkan Nane and Nguyen Huy Tuan. Approximate solutions of inverse problems for nonlinear space fractional diffusion equations with randomly perturbed data. *SIAM/ASA Journal on Uncertainty Quantification*, 6(1):302–338, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Nobile:2024:CTO

[NV24] Fabio Nobile and Tommaso Vanzan. A combination technique for optimal control problems constrained by random PDEs. *SIAM/ASA Journal on Uncertainty Quantification*, 12(2):693–721, ???? 2024. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/22M1532263`.

Nickl:2020:CRP

[NvdGW20] Richard Nickl, Sara van de Geer, and Sven Wang. Convergence rates for penalized least squares estimators in PDE constrained regression problems. *SIAM/ASA Journal on Uncertainty Quantification*, 8(1):374–413, ???? 2020. CODEN SJUQA3. ISSN 2166-2525.

Ozen:2016:DPC

[OB16] H. Cagan Ozen and Guillaume Bal. Dynamical polynomial chaos expansions and long time evolution of differential equations with random forcing. *SIAM/ASA Journal on Uncertainty Quantification*, 4(1):609–635, ???? 2016. CODEN SJUQA3. ISSN 2166-2525.

Oughton:2016:HEM

[OC16] Rachel H. Oughton and Peter S. Craig. Hierarchical emulation: a method for modeling and comparing nested simulators. *SIAM/ASA Journal on Uncertainty Quantification*, 4(1):495–519, ???? 2016. CODEN SJUQA3. ISSN 2166-2525.

Owen:2017:CSB

[OCMB17] N. E. Owen, P. Challenor, P. P. Menon, and S. Bennani. Comparison of surrogate-based uncertainty quantification methods for computationally expensive simulators. *SIAM/ASA Journal on Uncertainty Quantification*, 5(1):403–435, ???? 2017. CODEN SJUQA3. ISSN 2166-2525.

Oughton:2022:IVE

[OGH22] Rachel H. Oughton, Michael Goldstein, and John C. P. Hemmings. Intermediate variable emulation: Using internal processes in simulators to build more informative emulators. *SIAM/ASA Journal on Uncertainty Quantification*, 10(1):268–293, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/20M1370902`.

Owen:2021:EEA

[OH21] Art B. Owen and Christopher Hoyt. Efficient estimation of the ANOVA mean dimension, with an application to neural net classification. *SIAM/ASA Journal on Uncertainty Quantification*, 9(2):708–730, ???? 2021. CODEN SJUQA3. ISSN 2166-2525.

Osthus:2020:PCA

[OHK+20] Dave Osthus, Jeffrey D. Hyman, Satish Karra, Nishant Panda, and Gowri Srinivasan. A probabilistic clustering approach for identifying primary subnetworks of discrete fracture networks with quantified uncertainty. *SIAM/ASA Journal on Uncertainty Quantification*, 8(2):573–600, ???? 2020. CODEN SJUQA3. ISSN 2166-2525.

Oliver:2017:MRM

[Oli17] Dean S. Oliver. Metropolized randomized maximum likelihood for improved sampling from multimodal distributions. *SIAM/ASA Journal on Uncertainty Quantification*, 5(1):259–277, ???? 2017. CODEN SJUQA3. ISSN 2166-2525.

Owen:2017:SVM

[OP17] Art B. Owen and Clémentine Prieur. On Shapley value for measuring importance of dependent inputs. *SIAM/ASA Journal on Uncertainty Quantification*, 5(1):986–1002, ???? 2017. CODEN SJUQA3. ISSN 2166-2525.

Omre:2021:BSI

[OR21] Henning Omre and Kjartan Rimstad. Bayesian spatial inversion and conjugate selection Gaussian prior models. *SIAM/ASA Journal on Uncertainty Quantification*, 9(2):420–445, ???? 2021. CODEN SJUQA3. ISSN 2166-2525.

OMalley:2014:CPN

[OV14] D. O'Malley and V. V. Vesselinov. A combined probabilistic... nonprobabilistic decision analysis for contaminant remediation. *SIAM/ASA Journal on Uncertainty Quantification*, 2(1):607–621, ???? 2014. CODEN SJUQA3. ISSN 2166-2525.

Owen:2025:BEG

[OV25] Jonathan Owen and Ian Vernon. Bayesian emulation of grey-box multimodel ensembles exploiting known interior structure. *SIAM/ASA Journal on Uncertainty Quantification*, 13(3):1501–1542, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/24M1669037`.

Osthus:2019:PUB

[OVHW19] Dave Osthus, Scott A. Vander Wiel, Nelson M. Hoffman, and Frederick J. Wysocki. Prediction uncertainties beyond the range of experience: a case study in inertial confinement fusion implosion experiments. *SIAM/ASA Journal on Uncertainty Quantification*, 7(2):604–633, ???? 2019. CODEN SJUQA3. ISSN 2166-2525.

Owen:2013:VCG

[Owe13] Art B. Owen. Variance components and generalized Sobol' indices. *SIAM/ASA Journal on Uncertainty Quantification*,

1(1):19–41, ???? 2013. CODEN SJUQA3. ISSN 2166-2525.

Owen:2014:SIS

[Owe14] Art B. Owen. Sobol' indices and Shapley value. *SIAM/ASA Journal on Uncertainty Quantification*, 2(1):245–251, ???? 2014. CODEN SJUQA3. ISSN 2166-2525.

Pulch:2019:SPS

[PA19] Roland Pulch and Florian Augustin. Stability preservation in stochastic Galerkin projections of dynamical systems. *SIAM/ASA Journal on Uncertainty Quantification*, 7(2):634–651, ???? 2019. CODEN SJUQA3. ISSN 2166-2525.

Park:2025:SSB

[Par25] Joonha Park. Scalable simulation-based inference for implicitly defined models using a metamodel for Monte Carlo log-likelihood estimator. *SIAM/ASA Journal on Uncertainty Quantification*, 13(3):1578–1615, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/24M1707079`.

Pampell:2014:PDT

[PAS14] A. Pampell, A. B. Aceves, and G. Srinivasan. Predicting dynamic trends of the Atlantic meridional overturning circulation for transient and stochastic forcing effects. *SIAM/ASA Journal on Uncertainty Quantification*, 2(1):585–606, ???? 2014. CODEN SJUQA3. ISSN 2166-2525.

Prescott:2020:MAB

[PB20] Thomas P. Prescott and Ruth E. Baker. Multifidelity approximate Bayesian computation. *SIAM/ASA Journal on Uncertainty Quantification*, 8(1):114–138, ???? 2020. CODEN SJUQA3. ISSN 2166-2525.

Prescott:2021:MAB

[PB21] Thomas P. Prescott and Ruth E. Baker. Multifidelity approximate Bayesian computation with sequential Monte Carlo parameter sampling. *SIAM/ASA Journal on Uncertainty Quantification*, 9(2):788–817, ???? 2021. CODEN SJUQA3. ISSN 2166-2525.

Patil:2023:ROM

[PB23] Prerna Patil and Hessam Babaee. Reduced-order modeling with time-dependent bases for PDEs with stochastic boundary conditions. *SIAM/ASA Journal on Uncertainty Quantification*, 11(3):727–756, ???? 2023. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/21M1468097`.

Petit:2023:PSG

[PBFV23] Sébastien J. Petit, Julien Bect, Paul Feliot, and Emmanuel Vazquez. Parameter selection in Gaussian process interpolation: An empirical study of selection criteria. *SIAM/ASA Journal on Uncertainty Quantification*, 11 (4):1308–1328, December 2023. CODEN SJUQA3. ISSN 2166-2525.

Papandreou:2023:TGS

[PCGD23] Yanni Papandreou, Jon Cockayne, Mark Girolami, and Andrew Duncan. Theoretical guarantees for the statistical finite element method. *SIAM/ASA Journal on Uncertainty Quantification*, 11(4): 1278–1307, November 2023. CODEN SJUQA3. ISSN 2166-2525.

Peherstorfer:2019:MMC

[Peh19] Benjamin Peherstorfer. Multifidelity Monte Carlo estimation with adaptive low-fidelity models. *SIAM/ASA Journal on Uncertainty Quantification*, 7(2): 579–603, ???? 2019. CODEN SJUQA3. ISSN 2166-2525.

Picheny:2013:NST

[PG13] Victor Picheny and David Ginsbourger. A nonstationary space-time Gaussian process model for partially converged simulations. *SIAM/ASA Journal on Uncertainty Quantification*, 1(1):57–78, ???? 2013. CODEN SJUQA3. ISSN 2166-2525.

Pham:2022:EAC

[PG22] Trung Pham and Alex A. Gorodetsky. Ensemble approximate control variate estimators: Applications to Multi-Fidelity importance sampling. *SIAM/ASA Journal on Uncertainty Quantification*, 10 (3):1250–1292, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/21M1390426`.

Patil:2022:OFU

[PKH22] Pratik Patil, Mikael Kuusela, and Jonathan Hobbs. Objective frequentist uncertainty quantification for atmospheric CO_2 retrievals. *SIAM/ASA Journal on Uncertainty Quantification*, 10(3):827–859, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/20M1356403`.

Perry:2019:ASH

[PKNW19] Daniel J. Perry, Robert M. Kirby, Akil Narayan, and Ross T. Whitaker. Allocation strategies for high fidelity models in the multifidelity regime. *SIAM/ASA Journal on Uncertainty Quantification*, 7(1): 203–231, ???? 2019. CODEN SJUQA3. ISSN 2166-2525.

Peherstorfer:2018:MPC

[PKW18] Benjamin Peherstorfer, Boris Kramer, and Karen Willcox. Multifidelity preconditioning of the cross-entropy method for rare event simulation and failure probability estimation. *SIAM/ASA Journal on Uncertainty Quantification*, 6(2): 737–761, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Parno:2018:TMA

[PM18] Matthew D. Parno and Youssef M. Marzouk. Transport map accelerated Markov Chain Monte Carlo. *SIAM/ASA Journal on Uncertainty Quantification*, 6 (2):645–682, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Portone:2022:BIU

[PM22] Teresa Portone and Robert D. Moser. Bayesian inference of an uncertain generalized diffusion operator. *SIAM/ASA Journal on Uncertainty Quantification*, 10(1):151–178, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/21M141659X`.

Parno:2016:MSB

[PMM16] Matthew Parno, Tarek Moselhy, and Youssef Marzouk. A multiscale strategy for Bayesian inference using transport maps. *SIAM/ASA Journal on Uncertainty Quantification*, 4(1): 1160–1190, ???? 2016. CODEN SJUQA3. ISSN 2166-2525.

Pagani:2017:ESP

[PMQ17] Stefano Pagani, Andrea Manzoni, and Alfio Quarteroni. Efficient state/parameter estimation in nonlinear unsteady PDEs by a reduced basis ensemble Kalman filter. *SIAM/ASA Journal on Uncertainty Quantification*, 5(1):890–921, ???? 2017. CODEN SJUQA3. ISSN 2166-2525.

Patel:2021:GBP

[PO21] Dhruv V. Patel and Assad A. Oberai. GAN-based priors for quantifying uncertainty in supervised learning. *SIAM/ASA Journal on Uncertainty Quantification*, 9(3):1314–1343, ???? 2021. CODEN SJUQA3. ISSN 2166-2525.

Pritchard:2023:TPL

[PP23] Nathaniel Pritchard and Vivak Patel. Towards practical large-scale randomized iterative least squares solvers through uncertainty quantification. *SIAM/ASA Journal on Uncertainty Quantification*, 11(3):996–1024, ???? 2023. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/22M1515057`.

Padonou:2016:PGP

[PR16] Esperan Padonou and Olivier Roustant. Polar Gaussian processes and experimental designs in circular domains. *SIAM/ASA Journal on Uncertainty Quantification*, 4(1):1014–1033, ???? 2016. CODEN SJUQA3. ISSN 2166-2525.

Pronzato:2024:WLO

[PR24] Luc Pronzato and Maria-João Rendas. Weighted leave-one-out cross validation. *SIAM/ASA Journal on Uncertainty Quantification*, 12 (4):1213–1239, ???? 2024. CODEN SJUQA3. ISSN 2166-2525. URL `https:`

//epubs.siam.org/doi/10.1137/23M1615917.

Plischke:2021:CSE

[PRB21] Elmar Plischke, Giovanni Rabitti, and Emanuele Borgonovo. Computing Shapley effects for sensitivity analysis. *SIAM/ASA Journal on Uncertainty Quantification*, 9(4):1411–1437, ???? 2021. CODEN SJUQA3. ISSN 2166-2525.

Papanicolaou:2017:DRS

[PS17] Andrew Papanicolaou and Konstantinos Spiliopoulos. Dimension reduction in statistical estimation of partially observed multiscale processes. *SIAM/ASA Journal on Uncertainty Quantification*, 5(1):1220–1247, ???? 2017. CODEN SJUQA3. ISSN 2166-2525.

Pembery:2020:HER

[PS20] O. R. Pembery and E. A. Spence. The Helmholtz equation in random media: Well-posedness and a priori bounds. *SIAM/ASA Journal on Uncertainty Quantification*, 8(1):58–87, ???? 2020. CODEN SJUQA3. ISSN 2166-2525.

Perrin:2014:PEO

[PSDF14] G. Perrin, C. Soize, D. Duhamel, and C. Funfschilling. A posteriori error and optimal reduced basis for stochastic processes defined by a finite set of realizations. *SIAM/ASA Journal on Uncertainty Quantification*, 2(1):745–762, ???? 2014. CODEN SJUQA3. ISSN 2166-2525.

Park:2017:SRT

[PT17] M. Park and M. V. Tretyakov. Stochastic resin transfer molding process. *SIAM/ASA Journal on Uncertainty Quantification*, 5(1):1110–1135, ???? 2017. CODEN SJUQA3. ISSN 2166-2525.

Pulch:2013:SGM

[Pul13] Roland Pulch. Stochastic Galerkin methods for analyzing equilibria of random dynamical systems. *SIAM/ASA Journal on Uncertainty Quantification*, 1(1):408–430, ???? 2013. CODEN SJUQA3. ISSN 2166-2525.

Pronzato:2020:BQE

[PZ20] Luc Pronzato and Anatoly Zhigljavsky. Bayesian quadrature, energy minimization, and space-filling design. *SIAM/ASA Journal on Uncertainty Quantification*, 8(3):959–1011, ???? 2020. CODEN SJUQA3. ISSN 2166-2525.

Pavliotis:2024:MME

[PZ24] Grigorios A. Pavliotis and Andrea Zanoni. A method of moments estimator for interacting particle systems and their mean field limit. *SIAM/ASA Journal on Uncertainty Quantification*, 12(2):262–288, April 2024. CODEN SJUQA3. ISSN 2166-2525.

Qian:2018:MMC

[QPO+18] E. Qian, B. Peherstorfer, D. O'Malley, V. V. Vesselinov, and K. Willcox. Multifidelity Monte Carlo estimation of variance and sensitivity indices. *SIAM/ASA Journal on Uncertainty Quantification*, 6 (2):683–706, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Rao:2021:ECE

[RA21] Vishwas Rao and Mihai Anitescu. Efficient computation of extreme excursion probabilities for dynamical systems through Rice's formula. *SIAM/ASA Journal on Uncertainty Quantification*, 9(2):731–762, ???? 2021. CODEN SJUQA3. ISSN 2166-2525.

Rahman:2014:GAD

[Rah14] Sharif Rahman. A generalized ANOVA dimensional decomposition for dependent probability measures. *SIAM/ASA Journal on Uncertainty Quantification*, 2(1):670–697, ???? 2014. CODEN SJUQA3. ISSN 2166-2525.

Rahman:2016:SI

[Rah16] Sharif Rahman. The f-sensitivity index. *SIAM/ASA Journal on Uncertainty Quantification*, 4(1):130–162, ???? 2016. CODEN SJUQA3. ISSN 2166-2525.

Rahman:2018:MPP

[Rah18] Sharif Rahman. Mathematical properties of polynomial dimensional decomposition. *SIAM/ASA Journal on Uncertainty Quantification*, 6 (2):816–844, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Rahman:2020:SCE

[Rah20] Sharif Rahman. A spline chaos expansion. *SIAM/ASA Journal on Uncertainty Quantification*, 8(1):27–57, ???? 2020. CODEN SJUQA3. ISSN 2166-2525.

Rabitti:2019:SOI

[RB19] Giovanni Rabitti and Emanuele Borgonovo. A Shapley–Owen index for interaction quantification. *SIAM/ASA Journal on Uncertainty Quantification*, 7 (3):1060–1075, ???? 2019. CODEN SJUQA3. ISSN 2166-2525.

Rohrbach:2022:RBA

[RDGS22] Paul B. Rohrbach, Sergey Dolgov, Lars Grasedyck, and Robert Scheichl. Rank bounds for approximating Gaussian densities in the tensor-train format. *SIAM/ASA Journal on Uncertainty Quantification*, 10(3):1191–1224, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/20M1314653`.

Ruzayqat:2022:LPF

[RErB+22] Hamza Ruzayqat, Aimad Er-raiy, Alexandros Beskos, Dan Crisan, Ajay Jasra, and Nikolas Kantas. A lagged particle filter for stable filtering of certain high-dimensional state-space models. *SIAM/ASA Journal on Uncertainty Quantification*, 10(3):1130–1161, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/21M1450392`.

Rumsey:2024:GBM

[RFS24] Kellin N. Rumsey, Devin Francom, and Andy Shen. Generalized Bayesian MARS: Tools for stochastic computer model emulation. *SIAM/ASA Journal on Uncertainty Quantification*, 12(2):646–666, ???? 2024. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/23M1577122`.

Rumsey:2020:DMU

[RHBH20] Kellin Rumsey, Gabriel Huerta, Justin Brown, and Lauren Hund. Dealing with measurement uncertainties as nuisance parameters in Bayesian model calibration. *SIAM/ASA Journal on Uncertainty Quantification*, 8(4):1287–1309, ???? 2020. CODEN SJUQA3. ISSN 2166-2525.

Ray:2015:BCC

[RHH+15] J. Ray, Z. Hou, M. Huang, K. Sargsyan, and L. Swiler. Bayesian calibration of the community land model using surrogates. *SIAM/ASA Journal on Uncertainty Quantification*, 3(1):199–233, ???? 2015. CODEN SJUQA3. ISSN 2166-2525.

Rahman:2022:SDD

[RJ22] Sharif Rahman and Ramin Jahanbin. A spline dimensional decomposition for uncertainty quantification in high dimensions. *SIAM/ASA Journal on Uncertainty Quantification*, 10(1):404–438, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/20M1364175`.

Roosta-Khorasani:2015:ASA

[RKSA15] Farbod Roosta-Khorasani, Gábor J. Székely, and Uri M. Ascher. Assessing stochastic algorithms for large scale nonlinear least squares problems using extremal probabilities of linear combinations of gamma random variables. *SIAM/ASA Journal on Uncertainty Quantification*, 3(1):61–90, ???? 2015. CODEN SJUQA3. ISSN 2166-2525.

Rim:2018:DIU

[RM18] Donsub Rim and Kyle T. Mandli. Displacement interpolation using monotone rearrangement. *SIAM/ASA Journal on Uncertainty Quantification*, 6(4):1503–1531, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Rim:2018:TRM

[RML18] Donsub Rim, Scott Moe, and Randall J. LeVeque. Transport reversal for model reduction of hyperbolic partial differential equations. *SIAM/ASA Jour-*

nal on Uncertainty Quantification, 6(1):118–150, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Roustant:2020:GKG

[RPD+20] Olivier Roustant, Espéran Padonou, Yves Deville, Aloïs Clément, Guillaume Perrin, Jean Giorla, and Henry Wynn. Group kernels for Gaussian process metamodels with categorical inputs. *SIAM/ASA Journal on Uncertainty Quantification*, 8(2):775–806, ???? 2020. CODEN SJUQA3. ISSN 2166-2525.

Resseguier:2021:QTR

[RPMC21] Valentin Resseguier, Agustin M. Picard, Etienne Memin, and Bertrand Chapron. Quantifying truncation-related uncertainties in unsteady fluid dynamics reduced order models. *SIAM/ASA Journal on Uncertainty Quantification*, 9(3): 1152–1183, ???? 2021. CODEN SJUQA3. ISSN 2166-2525.

Rao:2015:PEE

[RS15a] Vishwas Rao and Adrian Sandu. A posteriori error estimates for the solution of variational inverse problems. *SIAM/ASA Journal on Uncertainty Quantification*, 3(1):737–761, ???? 2015. CODEN SJUQA3. ISSN 2166-2525.

Regier:2015:MMU

[RS15b] Jeffrey C. Regier and Philip B. Stark. Mini-minimax uncertainty quantification for emulators. *SIAM/ASA Journal on Uncertainty Quantification*, 3 (1):686–708, ???? 2015. CODEN SJUQA3. ISSN 2166-2525.

Rasmussen:2024:BAI

[RSGK24] Aksel K. Rasmussen, Fanny Seizilles, Mark Girolami, and Ieva Kazlauskaite. The Bayesian approach to inverse Robin problems. *SIAM/ASA Journal on Uncertainty Quantification*, 12(3):1050–1084, ???? 2024. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/23M1620624`.

Romer:2016:SMR

[RSW16] Ulrich Römer, Sebastian Schöps, and Thomas Weiland. Stochastic modeling and regularity of the nonlinear elliptic curl–curl equation. *SIAM/ASA Journal on Uncertainty Quantification*, 4(1):952–979, ???? 2016. CODEN SJUQA3. ISSN 2166-2525.

Ren:2020:CIM

[RV20] Kui Ren and Sarah Vallélian. Characterizing impacts of model uncertainties in quantitative photoacoustics. *SIAM/ASA Journal on Uncertainty Quantification*, 8(2):636–667, ???? 2020. CODEN SJUQA3. ISSN 2166-2525.

Reich:2021:FPP

[RW21] Sebastian Reich and Simon Weissmann. Fokker–Planck particle systems for Bayesian inference: Computational approaches. *SIAM/ASA Journal on Uncertainty Quantification*, 9(2):446–482, ???? 2021. CODEN SJUQA3. ISSN 2166-2525.

Sanz-Alonso:2018:ISN

[SA18] Daniel Sanz-Alonso. Importance sampling and necessary sample size: an information theory approach. *SIAM/ASA Journal on Uncertainty Quantification*, 6(2):867–879, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Sanz-Alonso:2015:LTA

[SAS15] Daniel Sanz-Alonso and Andrew M. Stuart. Long-time asymptotics of the filtering distribution for partially observed chaotic dynamical systems. *SIAM/ASA Journal on Uncertainty Quantification*, 3 (1):1200–1220, ???? 2015. CODEN SJUQA3. ISSN 2166-2525.

Sanz-Alonso:2024:ACF

[SAW24] Daniel Sanz-Alonso and Nathan Waniorek. Analysis of a computational framework for Bayesian inverse problems: Ensemble Kalman updates and MAP estimators under mesh refinement. *SIAM/ASA Journal on Uncertainty Quantification*, 12(1):30–68, February 2024. CODEN SJUQA3. ISSN 2166-2525.

Sanz-Alonso:2022:FER

[SAY22] Daniel Sanz-Alonso and Ruiyi Yang. Finite element representations of Gaussian processes: Balancing numerical and statistical accuracy. *SIAM/ASA Journal on Uncertainty Quantification*, 10(4):1323–1349, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/21M144788X`.

Spiller:2014:AEC

[SBB+14] Elaine T. Spiller, M. J. Bayarri, James O. Berger, Eliza S. Calder, Abani K. Patra, E. Bruce Pitman, and Robert L. Wolpert. Automating emulator construction for geophysical hazard maps. *SIAM/ASA Journal on Uncertainty Quantification*, 2(1): 126–152, ???? 2014. CODEN SJUQA3. ISSN 2166-2525.

Saibaba:2019:EMB

[SBBA19] Arvind K. Saibaba, Johnathan Bardsley, D. Andrew Brown, and Alen Alexanderian. Efficient marginalization-based MCMC methods for hierarchical Bayesian inverse problems. *SIAM/ASA Journal on Uncertainty Quantification*, 7(3): 1105–1131, ???? 2019. CODEN SJUQA3. ISSN 2166-2525.

Sung:2022:CIC

[SBW22] Chih-Li Sung, Beau David Barber, and Berkley J. Walker. Calibration of inexact computer models with heteroscedastic errors. *SIAM/ASA Journal on Uncertainty Quantification*, 10(4):1733–1752, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/21M1417946`.

Severino:2020:UQU

[SC20] Gerardo Severino and Salvatore Cuomo. Uncertainty quantification of unsteady flows generated by line-sources through heterogeneous geological formations. *SIAM/ASA Journal on Uncertainty Quantification*, 8(2):807–825, ???? 2020. CODEN SJUQA3. ISSN 2166-2525.

Scarabosio:2022:DNN

[Sca22] Laura Scarabosio. Deep neural network surrogates for nonsmooth quantities of interest in shape uncertainty quantification. *SIAM/ASA Journal on Uncertainty Quantification*, 10(3):975–1011, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/21M1393078`.

Sinsbeck:2021:SDC

[SCN21] Michael Sinsbeck, Emily Cooke, and Wolfgang Nowak. Sequential design of computer experiments for the computation of Bayesian model evidence. *SIAM/ASA Journal on Uncertainty Quantification*, 9(1):260–279, ???? 2021. CODEN SJUQA3. ISSN 2166-2525.

Shahrokhian:2025:ADC

[SDL+25] Anita Shahrokhian, Xinwei Deng, C. Devon Lin, Pritam Ranjan, and Li Xu. Adaptive design for contour estimation from computer experiments with quantitative and qualitative inputs. *SIAM/ASA Journal on Uncertainty Quantification*, 13(4):1766–1790, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/24M1685742`.

Sousedik:2016:ISI

[SE16] Bedrich Sousedík and Howard C. Elman. Inverse subspace iteration for spectral stochastic finite element methods. *SIAM/ASA Journal on Uncertainty Quantification*, 4(1):163–189, ???? 2016. CODEN SJUQA3. ISSN 2166-2525.

Semochkina:2025:MOU

[SFW25] Daria Semochkina, Alexander I. J. Forrester, and David C. Woods. Multiobjective optimization using expected quantile improvement for decision making in disease outbreaks. *SIAM/ASA Journal on Uncertainty Quantification*, 13(1):228–250, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/24M1633625`.

Staber:2015:ASL

[SG15] B. Staber and J. Guilleminot. Approximate solutions of Lagrange multipliers for information-theoretic random field models. *SIAM/ASA Journal on Uncertainty Quantification*, 3(1): 599–621, ???? 2015. CODEN SJUQA3. ISSN 2166-2525.

Sun:2019:ESD

[SGH+19] Furong Sun, Robert B. Gramacy, Benjamin Haaland, Earl Lawrence, and Andrew Walker. Emulating satellite drag from large simulation experiments. *SIAM/ASA Journal on Uncertainty Quantification*, 7(2):720–759, ???? 2019. CODEN SJUQA3. ISSN 2166-2525.

Shulkind:2018:EDN

[SHA18] Gal Shulkind, Lior Horesh, and Haim Avron. Experimental design for nonparametric correction of misspecified dynamical models. *SIAM/ASA Journal on Uncertainty Quantification*, 6(2):880–906, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Schick:2014:NGM

[SHL14] M. Schick, V. Heuveline, and O. P. Le Maître. A Newton–Galerkin method for fluid flow exhibiting uncertain periodic dynamics. *SIAM/ASA Journal on Uncertainty Quantification*, 2(1):153–173, ???? 2014. CODEN SJUQA3. ISSN 2166-2525.

Siebel:2025:CRM

[Sie25] Maximilian Siebel. Convergence rates for the maximum a posteriori estimator in PDE-regression models with random design. *SIAM/ASA Journal on Uncertainty Quantification*, 13(4):1862–1903, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/25M1744526`.

Sung:2024:SDD

[SJM+24] Chih-Li Sung, Yi (Irene) Ji, Simon Mak, Wenjia Wang, and Tao Tang. Stacking designs: Designing multifidelity computer experiments with target predictive accuracy. *SIAM/ASA Journal on Uncertainty Quantification*, 12(1):157–181, March 2024. CODEN SJUQA3. ISSN 2166-2525.

Sharrock:2022:JOP

[SK22] Louis Sharrock and Nikolas Kantas. Joint online parameter estimation and optimal sensor placement for the partially observed stochastic advection–diffusion equation. *SIAM/ASA Journal on Uncertainty Quantification*, 10(1):55–95, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/20M1375073`.

Sousedik:2022:SGM

[SL22] Bedrich Sousedík and Kookjin Lee. Stochastic Galerkin methods for linear stability analysis of systems with parametric uncertainty. *SIAM/ASA Journal on Uncertainty Quantification*, 10(3):1101–1129, ????

2022. CODEN SJUQA3. ISSN 2166-2525. URL https://epubs.siam.org/doi/10.1137/21M1415595.

Spagnol:2019:GSA

[SLD19] Adrien Spagnol, Rodolphe Le Riche, and Sébastien Da Veigao. Global sensitivity analysis for optimization with variable selection. *SIAM/ASA Journal on Uncertainty Quantification*, 7(2):417–443, ???? 2019. CODEN SJUQA3. ISSN 2166-2525.

Scott:2019:AZR

[SLH19] James M. Scott, M. Paul Laiu, and Cory D. Hauck. Analysis of the zero relaxation limit of hyperbolic balance laws with random initial data. *SIAM/ASA Journal on Uncertainty Quantification*, 7(3):806–837, ???? 2019. CODEN SJUQA3. ISSN 2166-2525.

Strait:2025:CIB

[SMM+25] Justin D. Strait, Kelly R. Moran, Alexander C. Murph, Jeffrey D. Hyman, Hari S. Viswanathan, and Philip H. Stauffer. Covariate-informed bifidelity bias correction of distributional output. *SIAM/ASA Journal on Uncertainty Quantification*, 13(3):1616–1648, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL https://epubs.siam.org/doi/10.1137/24M1690667.

Sinsbeck:2017:SDC

[SN17] Michael Sinsbeck and Wolfgang Nowak. Sequential design of computer experiments for the solution of Bayesian inverse problems. *SIAM/ASA Journal on Uncertainty Quantification*, 5(1):640–664, ???? 2017. CODEN SJUQA3. ISSN 2166-2525.

Seshadri:2017:ESQ

[SNM17] Pranay Seshadri, Akil Narayan, and Sankaran Mahadevan. Effectively subsampled quadratures for least squares polynomial approximations. *SIAM/ASA Journal on Uncertainty Quantification*, 5(1):1003–1023, ???? 2017. CODEN SJUQA3. ISSN 2166-2525.

Song:2016:SEG

[SNS16] Eunhye Song, Barry L. Nelson, and Jeremy Staum. Shapley effects for global sensitivity analysis: Theory and computation. *SIAM/ASA Journal on Uncertainty Quantification*, 4(1):1060–1083, ???? 2016. CODEN SJUQA3. ISSN 2166-2525.

Strong:2014:WMG

[SO14] Mark Strong and Jeremy E. Oakley. When is a model good enough? Deriving the expected value of model improvement via specifying internal model discrepancies. *SIAM/ASA Journal on Uncertainty Quantification*, 2(1):106–125, ???? 2014.

CODEN SJUQA3. ISSN 2166-2525.

Soize:2015:PCE

[Soi15] C. Soize. Polynomial chaos expansion of a multimodal random vector. *SIAM/ASA Journal on Uncertainty Quantification*, 3(1):34–60, ???? 2015. CODEN SJUQA3. ISSN 2166-2525.

Soize:2017:OPT

[Soi17] C. Soize. Optimal partition in terms of independent random vectors of any non-Gaussian vector defined by a set of realizations. *SIAM/ASA Journal on Uncertainty Quantification*, 5(1):176–211, ???? 2017. CODEN SJUQA3. ISSN 2166-2525.

Silvester:2016:OSL

[SP16] David Silvester and Pranjal. An optimal solver for linear systems arising from stochastic FEM approximation of diffusion equations with random coefficients. *SIAM/ASA Journal on Uncertainty Quantification*, 4(1):298–311, ???? 2016. CODEN SJUQA3. ISSN 2166-2525.

Sun:2021:RSD

[SPHJ21] Wenbo Sun, Matthew Plumlee, Jingwen Hu, and Jionghua (Judy) Jin. Robust system design with limited experimental data and an inexact simulation model. *SIAM/ASA Journal on Uncertainty Quantification*, 9(2): 483–506, ???? 2021. CODEN SJUQA3. ISSN 2166-2525.

Spiliopoulos:2020:IGA

[Spi20] Konstantinos Spiliopoulos. Information geometry for approximate Bayesian computation. *SIAM/ASA Journal on Uncertainty Quantification*, 8(1):229–260, ???? 2020. CODEN SJUQA3. ISSN 2166-2525.

Spokoiny:2023:DFN

[Spo23] Vladimir Spokoiny. Dimension free nonasymptotic bounds on the accuracy of high-dimensional Laplace approximation. *SIAM/ASA Journal on Uncertainty Quantification*, 11(3):1044–1068, ???? 2023. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/22M1495688`.

Silva:2025:AHE

[SPV25] Francesco A. B. Silva, Cecilia Pagliantini, and Karen Veroy. An adaptive hierarchical ensemble Kalman filter with reduced basis models. *SIAM/ASA Journal on Uncertainty Quantification*, 13(1):140–170, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/24M1653690`.

Stanhope:2017:RSI

[SRS17] S. Stanhope, J. E. Rubin, and D. Swigon. Robustness of solutions of the inverse problem for linear dynamical systems with uncertain data. *SIAM/ASA Journal on Uncertainty Quantification*, 5(1):572–597, ???? 2017. CODEN SJUQA3. ISSN 2166-2525.

Stein:2013:FNH

[SS13] Jerome L. Stein and Seth Stein. Formulating natural hazard policies under uncertainty. *SIAM/ASA Journal on Uncertainty Quantification*, 1(1):42–56, ???? 2013. CODEN SJUQA3. ISSN 2166-2525.

Sturlaugson:2015:SAC

[SS15] Liessman Sturlaugson and John W. Sheppard. Sensitivity analysis of continuous time Bayesian network reliability models. *SIAM/ASA Journal on Uncertainty Quantification*, 3(1):346–369, ???? 2015. CODEN SJUQA3. ISSN 2166-2525.

Sung:2025:AIS

[SSH25] Chih-Li Sung, Yao Song, and Ying Hung. Advancing inverse scattering with surrogate modeling and Bayesian inference for functional inputs. *SIAM/ASA Journal on Uncertainty Quantification*, 13(2):449–471, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/24M1637295`.

Singh:2013:PME

[SSJ+13] K. Singh, A. Sandu, M. Jardak, K. W. Bowman, and M. Lee. A practical method to estimate information content in the context of 4D-var data assimilation. *SIAM/ASA Journal on Uncertainty Quantification*, 1(1):106–138, ???? 2013. CODEN SJUQA3. ISSN 2166-2525.

Scheichl:2017:QMC

[SST17] R. Scheichl, A. M. Stuart, and A. L. Teckentrup. Quasi-Monte Carlo and multilevel Monte Carlo methods for computing posterior expectations in elliptic inverse problems. *SIAM/ASA Journal on Uncertainty Quantification*, 5(1):493–518, ???? 2017. CODEN SJUQA3. ISSN 2166-2525.

Swigon:2019:IJD

[SSZR19] David Swigon, Shelby R. Stanhope, Sven Zenker, and Jonathan E. Rubin. On the importance of the Jacobian determinant in parameter inference for random parameter and random measurement error models. *SIAM/ASA Journal on Uncertainty Quantification*, 7(3):975–1006, ???? 2019. CODEN SJUQA3. ISSN 2166-2525.

Sinsbeck:2015:IDA

[ST15] Michael Sinsbeck and Daniel M. Tartakovsky. Impact of data assimilation on cost-accuracy tradeoff in multifidelity models. *SIAM/ASA Journal on Uncertainty Quantification*, 3(1):954–968, ???? 2015. CODEN SJUQA3. ISSN 2166-2525.

Su:2017:SIS

[ST17] Chen Su and Xuemin Tu. Sequential implicit sampling methods for Bayesian inverse problems. *SIAM/ASA Journal on Uncertainty Quantification*, 5(1):519–539, ???? 2017. CODEN SJUQA3. ISSN 2166-2525.

Stark:2015:CVP

[Sta15] Philip B. Stark. Constraints versus priors. *SIAM/ASA Journal on Uncertainty Quantification*, 3(1):586–598, ???? 2015. CODEN SJUQA3. ISSN 2166-2525.

Schillings:2023:EBG

[STW23] Claudia Schillings, Claudia Totzeck, and Philipp Wacker. Ensemble-based gradient inference for particle methods in optimization and sampling. *SIAM/ASA Journal on Uncertainty Quantification*, 11(3):757–787, ???? 2023. CODEN SJUQA3. ISSN 2166-2525. URL https://epubs.siam.org/doi/10.1137/22M1533281.

Schaden:2020:MBL

[SU20] Daniel Schaden and Elisabeth Ullmann. On multilevel best linear unbiased estimators. *SIAM/ASA Journal on Uncertainty Quantification*, 8(2):601–635, ???? 2020. CODEN SJUQA3. ISSN 2166-2525.

Schaden:2021:AAM

[SU21] Daniel Schaden and Elisabeth Ullmann. Asymptotic analysis of multilevel best linear unbiased estimators. *SIAM/ASA Journal on Uncertainty Quantification*, 9(3):953–978, ???? 2021. CODEN SJUQA3. ISSN 2166-2525.

Spence:2023:WEP

[SW23] E. A. Spence and J. Wunsch. Wavenumber-explicit parametric holomorphy of Helmholtz solutions in the context of uncertainty quantification. *SIAM/ASA Journal on Uncertainty Quantification*, 11(2):567–590, ???? 2023. CODEN SJUQA3. ISSN 2166-2525. URL https://epubs.siam.org/doi/10.1137/22M1486170.

Salter:2022:QST

[SWGE22] James M. Salter, Daniel B. Williamson, Lauren J. Gregoire, and Tamsin L. Edwards. Quantifying spatio-temporal boundary condition uncertainty for the North American deglaciation. *SIAM/ASA Journal on Uncertainty Quantification*, 10(2):717–744, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL https://epubs.siam.org/doi/10.1137/21M1409135.

Spiller:2023:ZPG

[SWTA23] Elaine T. Spiller, Robert L. Wolpert, Pablo Tierz, and Taylor G. Asher. The zero problem: Gaussian process emulators for range-constrained computer models. *SIAM/ ASA Journal on Uncertainty Quantification*, 11(2):540–566, ???? 2023. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/21M1467420`.

Seshadri:2019:DRG

[SYP19] Pranay Seshadri, Shaowu Yuchi, and Geoffrey T. Parks. Dimension reduction via Gaussian ridge functions. *SIAM/ ASA Journal on Uncertainty Quantification*, 7(4):1301–1322, ???? 2019. CODEN SJUQA3. ISSN 2166-2525.

Sawko:2022:EGC

[SZ22] Robert Sawko and Małgorzata J. Zimoń. Effective generation of compressed stationary Gaussian fields. *SIAM/ ASA Journal on Uncertainty Quantification*, 10(1):439–452, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/20M1375541`.

Schwab:2023:DLH

[SZ23] Christoph Schwab and Jakob Zech. Deep learning in high dimension: Neural network expression rates for analytic functions in $L^2(\mathbf{R}^d, \gamma_d)$. *SIAM/ ASA Journal on Uncertainty Quantification*, 11(1):199–234, ???? 2023. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/21M1462738`.

Tan:2015:SBP

[Tan15] Matthias Hwai Yong Tan. Sequential Bayesian polynomial chaos model selection for estimation of sensitivity indices. *SIAM/ASA Journal on Uncertainty Quantification*, 3(1):146–168, ???? 2015. CODEN SJUQA3. ISSN 2166-2525.

Tan:2019:GPM

[Tan19] Matthias H. Y. Tan. Gaussian process modeling of finite element models with functional inputs. *SIAM/ASA Journal on Uncertainty Quantification*, 7(4):1133–1161, ???? 2019. CODEN SJUQA3. ISSN 2166-2525.

Tan:2020:BOE

[Tan20] Matthias H. Y. Tan. Bayesian optimization of expected quadratic loss for multiresponse computer experiments with internal noise. *SIAM/ASA Journal on Uncertainty Quantification*, 8(3):891–925, ???? 2020. CODEN SJUQA3. ISSN 2166-2525.

Torlo:2018:SWR

[TBR18] Davide Torlo, Francesco Ballarin, and Gianluigi Rozza. Stabilized weighted reduced basis methods for parametrized advection dominated problems with random inputs. *SIAM/ ASA Journal on Uncertainty Quantification*, 6(4):1475–1502, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Teckentrup:2020:CGP

[Tec20] Aretha L. Teckentrup. Convergence of Gaussian process regression with estimated hyper-parameters and applications in Bayesian inverse problems. *SIAM/ASA Journal on Uncertainty Quantification*, 8(4): 1310–1337, ???? 2020. CODEN SJUQA3. ISSN 2166-2525.

Thorarinsdottir:2013:UPD

[TGG13] Thordis L. Thorarinsdottir, Tilmann Gneiting, and Nadine Gissibl. Using proper divergence functions to evaluate climate models. *SIAM/ASA Journal on Uncertainty Quantification*, 1(1):522–534, ???? 2013. CODEN SJUQA3. ISSN 2166-2525.

Tsilifis:2017:EBE

[TGH17] Panagiotis Tsilifis, Roger G. Ghanem, and Paris Hajali. Efficient Bayesian experimentation using an expected information gain lower bound. *SIAM/ASA Journal on Uncertainty Quantification*, 5(1):30–62, ???? 2017. CODEN SJUQA3. ISSN 2166-2525.

Travelletti:2023:UQE

[TGL23] Cédric Travelletti, David Ginsbourger, and Niklas Linde. Uncertainty quantification and experimental design for large-scale linear inverse problems under Gaussian process priors. *SIAM/ASA Journal on Uncertainty Quantification*, 11(1):168–198, ???? 2023. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/21M1445028`.

Thorbergsson:2018:EDP

[TH18] Leifur Thorbergsson and Giles Hooker. Experimental design for partially observed Markov decision processes. *SIAM/ASA Journal on Uncertainty Quantification*, 6(2):549–567, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Tang:2014:SGQ

[TI14] Gary Tang and Gianluca Iaccarino. Subsampled Gauss quadrature nodes for estimating polynomial chaos expansions. *SIAM/ASA Journal on Uncertainty Quantification*, 2 (1):423–443, ???? 2014. CODEN SJUQA3. ISSN 2166-2525.

Tsitsvero:2025:LIP

[TJL25] Mikhail Tsitsvero, Mingoo Jin, and Andrey Lyalin. Learning inducing points and uncertainty on molecular data by scalable variational Gaussian processes. *SIAM/ASA Journal on Uncertainty Quantification*, 13(2):543–562, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/23M1549584`.

Teckentrup:2015:MSC

[TJWG15] A. L. Teckentrup, P. Jantsch, C. G. Webster, and M. Gunzburger. A multilevel stochastic collocation method for partial differential equations with random input data. *SIAM/ASA Journal on Uncertainty Quantification*, 3(1):1046–1074, ???? 2015. CODEN SJUQA3. ISSN 2166-2525.

Terhag:2025:UQM

[TKBT25] Felix Terhag, Philipp Knechtges, Achim Basermann, and Raúl Tempone. Uncertainty quantification in machine learning based segmentation: a post-hoc approach for left ventricle volume estimation in MRI. *SIAM/ASA Journal on Uncertainty Quantification*, 13(1):90–113, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/23M161433X`.

Tan:2025:ALS

[TL25] Lezhi Tan and Jianfeng Lu. Accelerate Langevin sampling with birth–death process and exploration component. *SIAM/ASA Journal on Uncertainty Quantification*, 13(3):1265–1293, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/23M1577584`.

Tang:2024:HSG

[TMD24] Tao Tang, Simon Mak, and David Dunson. Hierarchical shrinkage Gaussian processes: Applications to computer code emulation and dynamical system recovery. *SIAM/ASA Journal on Uncertainty Quantification*, 12(4):1085–1112, ???? 2024. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/23M1550682`.

Taghvaei:2020:DMB

[TMM20] Amirhossein Taghvaei, Prashant G. Mehta, and Sean P. Meyn. Diffusion map-based algorithm for gain function approximation in the feedback particle filter. *SIAM/ASA Journal on Uncertainty Quantification*, 8(3):1090–1117, ???? 2020. CODEN SJUQA3. ISSN 2166-2525.

Tong:2023:LDT

[TS23] Shanyin Tong and Georg Stadler. Large deviation theory-based adaptive importance sampling for rare events in high dimensions. *SIAM/ASA Journal on Uncertainty Quantification*, 11(3):788–813, ???? 2023. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/22M1524758`.

Takeda:2024:UEB

[TS24] Kota Takeda and Takashi Sakajo. Uniform error bounds of the ensemble transform Kalman filter for chaotic dynamics with multiplicative covariance inflation. *SIAM/ASA Journal on Uncertainty Quantification*, 12(4):1315–1335, ???? 2024. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/24M1637192`.

Tipireddy:2018:SBA

[TST18] R. Tipireddy, P. Stinis, and A. M. Tartakovsky. Stochastic basis adaptation and spatial domain decomposition for partial differential equations with random coefficients. *SIAM/ASA Journal on Uncertainty Quantification*, 6(1):273–301, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Tuo:2019:ACM

[Tuo19] Rui Tuo. Adjustments to computer models via projected kernel calibration. *SIAM/ASA Journal on Uncertainty Quantification*, 7(2):553–578, ???? 2019. CODEN SJUQA3. ISSN 2166-2525.

Tuo:2016:TFC

[TW16] Rui Tuo and C. F. Jeff Wu. A theoretical framework for calibration in computer models: Parametrization, estimation and convergence properties. *SIAM/ASA Journal on Uncertainty Quantification*, 4 (1):767–795, ???? 2016. CODEN SJUQA3. ISSN 2166-2525.

Tuo:2020:IRC

[TWW20] Rui Tuo, Yan Wang, and C. F. Jeff Wu. On the improved rates of convergence for Matérn-type kernel ridge regression with application to calibration of computer models. *SIAM/ASA Journal on Uncertainty Quantification*, 8(4): 1522–1547, ???? 2020. CODEN SJUQA3. ISSN 2166-2525.

Tatsuoka:2025:DLM

[TX25] Caroline Tatsuoka and Dongbin Xiu. Deep learning for model correction of dynamical systems with data scarcity. *SIAM/ASA Journal on Uncertainty Quantification*, 13(2):718–743, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/24M1704324`.

Uribe:2022:HGS

[UBD+22] Felipe Uribe, Johnathan M. Bardsley, Yiqiu Dong, Per Christian Hansen, and Nicolai A. B. Riis. A hybrid Gibbs sampler for edge-preserving tomographic reconstruction with uncertain view angles. *SIAM/ASA Journal on Uncertainty Quantification*, 10 (3):1293–1320, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/21M1412268`.

Ullmann:2015:MER

[UP15a] Elisabeth Ullmann and Iason Papaioannou. Multilevel estimation of rare events. *SIAM/ASA Journal on Uncertainty Quantification*, 3(1):922–953, ???? 2015. CODEN SJUQA3. ISSN 2166-2525.

Ullmann:2015:SLT

[UP15b] Elisabeth Ullmann and Catherine E. Powell. Solving logtransformed random diffusion problems by stochastic Galerkin mixed finite element methods. *SIAM/ASA Journal on Uncertainty Quantification*, 3(1):509–534, ???? 2015. CODEN SJUQA3. ISSN 2166-2525.

Uribe:2021:CEB

[UPMS21] Felipe Uribe, Iason Papaioannou, Youssef M. Marzouk, and Daniel Straub. Cross-entropy-based importance sampling with failure-informed dimension reduction for rare event simulation. *SIAM/ASA Journal on Uncertainty Quantification*, 9(2):818–847, ???? 2021. CODEN SJUQA3. ISSN 2166-2525.

vanAckooij:2017:SGF

[vAH17] Wim van Ackooij and R. Henrion. (Sub-)Gradient formulae for probability functions of random inequality systems under Gaussian distribution. *SIAM/ASA Journal on Uncertainty Quantification*, 5(1):63–87, ???? 2017. CODEN SJUQA3. ISSN 2166-2525.

Vidal-Codina:2016:EIM

[VCNGP16] F. Vidal-Codina, N. C. Nguyen, M. B. Giles, and J. Peraire. An empirical interpolation and model-variance reduction method for computing statistical outputs of parametrized stochastic partial differential equations. *SIAM/ASA Journal on Uncertainty Quantification*, 4(1):244–265, ???? 2016. CODEN SJUQA3. ISSN 2166-2525.

vandenBos:2020:GNQ

[vdBSBvB20] Laurent van den Bos, Benjamin Sanderse, Wim Bierbooms, and Gerard van Bussel. Generating nested quadrature rules with positive weights based on arbitrary sample sets. *SIAM/ASA Journal on Uncertainty Quantification*, 8(1):139–169, ???? 2020. CODEN SJUQA3. ISSN 2166-2525.

Vermiglio:2017:PCE

[Ver17] Rossana Vermiglio. Polynomial chaos expansions for the stability analysis of uncertain delay differential equations. *SIAM/ASA Journal on Uncertainty Quantification*, 5 (1):278–303, ???? 2017. CODEN SJUQA3. ISSN 2166-2525.

Vernon:2019:KBE

[VJC19] Ian Vernon, Samuel E. Jackson, and Jonathan A. Cumming. Known boundary emulation of complex computer models. *SIAM/ASA Journal on Uncertainty Quantification*, 7(3): 838–876, ???? 2019. CODEN SJUQA3. ISSN 2166-2525.

Vanmechelen:2025:MMC

[VLS25] P. Vanmechelen, G. Lombaert, and G. Samaey. Multilevel Markov chain Monte Carlo with likelihood scaling for Bayesian inversion with high-resolution observations. *SIAM/ ASA Journal on Uncertainty*

Quantification, 13(2):375–399, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/24M1634333`.

Vondrejc:2019:ACC

[VM19] Jaroslav Vondrejc and Hermann G. Matthies. Accurate computation of conditional expectation for highly nonlinear problems. *SIAM/ASA Journal on Uncertainty Quantification*, 7(4):1349–1368, ???? 2019. CODEN SJUQA3. ISSN 2166-2525.

Vollmer:2015:DIM

[Vol15] Sebastian J. Vollmer. Dimension-independent MCMC sampling for inverse problems with non-Gaussian priors. *SIAM/ASA Journal on Uncertainty Quantification*, 3(1):535–561, ???? 2015. CODEN SJUQA3. ISSN 2166-2525.

VanBarel:2019:ROP

[VV19] Andreas Van Barel and Stefan Vandewalle. Robust optimization of PDEs with random coefficients using a multilevel Monte Carlo method. *SIAM/ASA Journal on Uncertainty Quantification*, 7(1):174–202, ???? 2019. CODEN SJUQA3. ISSN 2166-2525.

Volodina:2020:DDN

[VW20] Victoria Volodina and Daniel Williamson. Diagnostics-driven nonstationary emulators using kernel mixtures. *SIAM/ASA Journal on Uncertainty Quantification*, 8(1):1–26, ???? 2020. CODEN SJUQA3. ISSN 2166-2525.

vanWyk:2015:PLN

[vWGBS15] Hans-Werner van Wyk, Max Gunzburger, John Burkhardt, and Miroslav Stoyanov. Power-law noises over general spatial domains and on nonstandard meshes. *SIAM/ASA Journal on Uncertainty Quantification*, 3(1):296–319, ???? 2015. CODEN SJUQA3. ISSN 2166-2525.

Wallstrom:2017:AMI

[Wal17] Timothy C. Wallstrom. On the application of McDiarmid's inequality to complex systems. *SIAM/ASA Journal on Uncertainty Quantification*, 5(1):240–245, ???? 2017. CODEN SJUQA3. ISSN 2166-2525.

Wang:2022:PPK

[Wan22] Yan Wang. Penalized projected kernel calibration for computer models. *SIAM/ASA Journal on Uncertainty Quantification*, 10(4):1652–1683, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/20M1387614`.

Williamson:2014:EBE

[WB14] Daniel Williamson and Adam T. Blaker. Evolving Bayesian emulators for structured chaotic time series, with application to large climate models. *SIAM/ASA Journal on Uncertainty*

Quantification, 2(1):1–28, ???? 2014. CODEN SJUQA3. ISSN 2166-2525.

Wang:2016:ESC

[WB16] Xiaojing Wang and James O. Berger. Estimating shape constrained functions using Gaussian processes. *SIAM/ASA Journal on Uncertainty Quantification*, 4(1):1–25, ???? 2016. CODEN SJUQA3. ISSN 2166-2525.

Wang:2015:PDF

[WBSC+15] P. Wang, D. A. Barajas-Solano, E. Constantinescu, S. Abhyankar, D. Ghosh, B. F. Smith, Z. Huang, and A. M. Tartakovsky. Probabilistic density function method for stochastic ODEs of power systems with uncertain power input. *SIAM/ASA Journal on Uncertainty Quantification*, 3 (1):873–896, ???? 2015. CODEN SJUQA3. ISSN 2166-2525.

Wu:2023:FSC

[WCG23] Keyi Wu, Peng Chen, and Omar Ghattas. A fast and scalable computational framework for large-scale high-dimensional Bayesian optimal experimental design. *SIAM/ASA Journal on Uncertainty Quantification*, 11(1):235–261, ???? 2023. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/21M1466499`.

Wang:2022:PWG

[WCL22] Yifei Wang, Peng Chen, and Wuchen Li. Projected Wasserstein gradient descent for high-dimensional Bayesian inference. *SIAM/ASA Journal on Uncertainty Quantification*, 10(4):1513–1532, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/21M1454018`.

Wilson:2022:VCM

[WGD22] Amy L. Wilson, Michael Goldstein, and Chris J. Dent. Varying coefficient models and design choice for Bayes linear emulation of complex computer models with limited model evaluations. *SIAM/ASA Journal on Uncertainty Quantification*, 10(1):350–378, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/20M1318560`.

White:2025:BPI

[WJWB25] Rebekah D. White, John D. Jakeman, Tim Wildey, and Troy Butler. Building population-informed priors for Bayesian inference using data-consistent stochastic inversion. *SIAM/ASA Journal on Uncertainty Quantification*, 13(3):1475–1500, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/24M1678234`.

Wagner:2022:EKF

[WPU22] Fabian Wagner, I. Papaioannou, and E. Ullmann. The ensemble Kalman filter for rare event estimation. *SIAM/ ASA Journal on Uncertainty Quantification*, 10(1):317–349, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/21M1404119`.

Wang:2016:EGT

[WR16] Ting Wang and Muruhan Rathinam. Efficiency of the Girsanov transformation approach for parametric sensitivity analysis of stochastic chemical kinetics. *SIAM/ASA Journal on Uncertainty Quantification*, 4(1):1288–1322, ???? 2016. CODEN SJUQA3. ISSN 2166-2525.

Wentworth:2016:PSV

[WSB16] Mami T. Wentworth, Ralph C. Smith, and H. T. Banks. Parameter selection and verification techniques based on global sensitivity analysis illustrated for an HIV model. *SIAM/ASA Journal on Uncertainty Quantification*, 4(1):266–297, ???? 2016. CODEN SJUQA3. ISSN 2166-2525.

Wen:2020:DMP

[WWLL20] Linjie Wen, Jiangqi Wu, Linjun Lu, and Jinglai Li. A defensive marginal particle filtering method for data assimilation. *SIAM/ASA Journal on Uncertainty Quantification*, 8 (3):1215–1235, ???? 2020. CODEN SJUQA3. ISSN 2166-2525.

Wang:2022:GPI

[WYHW22] Wenjia Wang, Xiaowei Yue, Benjamin Haaland, and C. F. Jeff Wu. Gaussian processes with input location error and applications to the composite parts assembly process. *SIAM/ ASA Journal on Uncertainty Quantification*, 10(2):619–650, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/20M1312447`.

Wu:2024:EEQ

[WZZ24] Zhizhang Wu, Zhiwen Zhang, and Xiaofei Zhao. Error estimate of a quasi-Monte Carlo time-splitting pseudospectral method for nonlinear Schrödinger equation with random potentials. *SIAM/ASA Journal on Uncertainty Quantification*, 12(1):1–29, January 2024. CODEN SJUQA3. ISSN 2166-2525.

Xu:2024:FDM

[XG24] Hui Xu and Mircea Grigoriu. Finite-dimensional models for response analysis. *SIAM/ASA Journal on Uncertainty Quantification*, 12(4):1424–1449, ???? 2024. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/24M1651745`.

Xu:2025:SRL

[XGD+25] Jin Xu, Junpeng Gong, Xiaojun Duan, Zhengming Wang, and Xu He. Sequentially refined Latin hypercube designs with flexibly and adaptively chosen sample sizes. *SIAM/ASA Journal on Uncertainty Quantification*, 13(4):1812–1827, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/24M1673048`.

Xu:2014:RES

[XLL14] Gongjun Xu, Guang Lin, and Jingchen Liu. Rare-event simulation for the stochastic Korteweg–de Vries equation. *SIAM/ASA Journal on Uncertainty Quantification*, 2(1): 698–716, ???? 2014. CODEN SJUQA3. ISSN 2166-2525.

Xie:2021:NBF

[XLWZ21] Wei Xie, Cheng Li, Yuefeng Wu, and Pu Zhang. A nonparametric Bayesian framework for uncertainty quantification in stochastic simulation. *SIAM/ASA Journal on Uncertainty Quantification*, 9(4):1527–1552, ???? 2021. CODEN SJUQA3. ISSN 2166-2525.

Xiao:2021:EEI

[XMLD21] Qian Xiao, Abhyuday Mandal, C. Devon Lin, and Xinwei Deng. EzGP: Easy-to-interpret Gaussian process models for computer experiments with both quantitative and qualitative factors. *SIAM/ASA Journal on Uncertainty Quantification*, 9(2):333–353, ???? 2021. CODEN SJUQA3. ISSN 2166-2525.

Xu:2017:MLE

[XS17] Wanting Xu and Michael L. Stein. Maximum likelihood estimation for a smooth Gaussian random field model. *SIAM/ASA Journal on Uncertainty Quantification*, 5(1):138–175, ???? 2017. CODEN SJUQA3. ISSN 2166-2525.

Xu:2019:MPC

[XSW19] Wanting Xu, Michael L. Stein, and Ian Wisher. Modeling and predicting chaotic circuit data. *SIAM/ASA Journal on Uncertainty Quantification*, 7(1):31–52, ???? 2019. CODEN SJUQA3. ISSN 2166-2525.

Xu:2025:FCC

[XWHR25] Wenzhe Xu, Daniel B. Williamson, Frederic Hourdin, and Romain Roehrig. Feature calibration for computer models. *SIAM/ASA Journal on Uncertainty Quantification*, 13(2):591–612, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/24M163253X`.

Yerramilli:2023:FBI

[YICA23] Suraj Yerramilli, Akshay Iyer, Wei Chen, and Daniel W. Apley. Fully Bayesian inference for latent variable Gaussian process models. *SIAM/ASA Journal on Uncertainty Quantification*, 11(4):1357–1381, December 2023. CODEN SJUQA3. ISSN 2166-2525.

Yang:2018:SIR

[YLT18] Xiu Yang, Weixuan Li, and Alexandre Tartakovsky. Sliced-Inverse-Regression–Aided rotated compressive sensing method for uncertainty quantification. *SIAM/ASA Journal on Uncertainty Quantification*, 6(4):1532–1554, ???? 2018. CODEN SJUQA3. ISSN 2166-2525.

Yu:2024:HES

[YSS24] Feng Yu, Lixin Shen, and Guohui Song. Hyperparameter estimation for sparse Bayesian learning models. *SIAM/ASA Journal on Uncertainty Quantification*, 12(3):759–787, ???? 2024. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/24M162844X`.

Yang:2020:RCM

[YWT20] Lun Yang, Peng Wang, and Daniel M. Tartakovsky. Resource-constrained model selection for uncertainty propagation and data assimilation. *SIAM/ASA Journal on Uncertainty Quantification*, 8(3):1118–1138, ???? 2020. CODEN SJUQA3. ISSN 2166-2525.

Yamada:2019:SOD

[YY19] Toshihiro Yamada and Kenta Yamamoto. Second order discretization of Bismut–Elworthy–Li formula: Application to sensitivity analysis. *SIAM/ASA Journal on Uncertainty Quantification*, 7(1):143–173, ???? 2019. CODEN SJUQA3. ISSN 2166-2525.

Yu:2020:INE

[YZAJ20] Yang Yu, Ning Zhang, Daniel W. Apley, and Wenxin Jiang. Including a nugget effect in lifted Brownian covariance models. *SIAM/ASA Journal on Uncertainty Quantification*, 8(4):1338–1357, ???? 2020. CODEN SJUQA3. ISSN 2166-2525.

Zhang:2025:MMC

[ZC25] Jingtao Zhang and Xi Chen. Multilevel Monte Carlo metamodeling for variance function estimation. *SIAM/ASA Journal on Uncertainty Quantification*, 13(3):980–1027, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/24M1689740`.

Zahr:2019:EGC

[ZCK19] Matthew J. Zahr, Kevin T. Carlberg, and Drew P. Kouri. An efficient, globally convergent method for optimization under uncertainty using adaptive model reduction and sparse grids. *SIAM/ASA Journal on Uncertainty Quantification*, 7(3):877–912, ???? 2019. CODEN SJUQA3. ISSN 2166-2525.

Zhang:2022:EBI

[ZGS22] Jiahui Zhang, Anne Gelb, and Theresa Scarnati. Empirical

Bayesian inference using a support informed prior. *SIAM/ ASA Journal on Uncertainty Quantification*, 10(2):745–774, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/21M140794X`.

Zhao:2021:LBM

[ZHY21] Weifeng Zhao, Juntao Huang, and Wen-An Yong. Lattice Boltzmann method for stochastic convection–diffusion equations. *SIAM/ASA Journal on Uncertainty Quantification*, 9 (2):536–563, ???? 2021. CODEN SJUQA3. ISSN 2166-2525.

Zhou:2017:HAM

[ZHYL17] Qingping Zhou, Zixi Hu, Zhewei Yao, and Jinglai Li. A hybrid adaptive MCMC algorithm in function spaces. *SIAM/ASA Journal on Uncertainty Quantification*, 5(1): 621–639, ???? 2017. CODEN SJUQA3. ISSN 2166-2525.

Zou:2022:LAR

[ZKA22] Zilong Zou, Drew P. Kouri, and Wilkins Aquino. A locally adapted reduced-basis method for solving risk-averse PDE-constrained optimization problems. *SIAM/ASA Journal on Uncertainty Quantification*, 10(4):1629–1651, ???? 2022. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/21M1411342`.

Zhang:2019:SDA

[ZLR19] Ru Zhang, C. Devon Lin, and Pritam Ranjan. A sequential design approach for calibrating dynamic computer simulators. *SIAM/ASA Journal on Uncertainty Quantification*, 7 (4):1245–1274, ???? 2019. CODEN SJUQA3. ISSN 2166-2525.

Zou:2024:LVH

[ZMC+24] Zongren Zou, Tingwei Meng, Paula Chen, Jérôme Darbon, and George Em Karniadakis. Leveraging viscous Hamilton–Jacobi PDEs for uncertainty quantification in scientific machine learning. *SIAM/ASA Journal on Uncertainty Quantification*, 12(4):1165–1191, ???? 2024. CODEN SJUQA3. ISSN 2166-2525. URL `https://epubs.siam.org/doi/10.1137/24M1646455`.

Zhu:2014:CAS

[ZNX14] Xueyu Zhu, Akil Narayan, and Dongbin Xiu. Computational aspects of stochastic collocation with multifidelity models. *SIAM/ASA Journal on Uncertainty Quantification*, 2(1):444–463, ???? 2014. CODEN SJUQA3. ISSN 2166-2525.

Zuo:2025:GAU

[ZOL25] Xinzhe Zuo, Stanley Osher, and Wuchen Li. Gradient-adjusted underdamped Langevin dynamics for sampling. *SIAM/ ASA Journal on Uncertainty*

Quantification, 13(4):1735–1765, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL https://epubs.siam.org/doi/10.1137/24M1702015.

Zhu:2021:ESS

[ZS21] Xujia Zhu and Bruno Sudret. Emulation of stochastic simulators using generalized lambda models. *SIAM/ASA Journal on Uncertainty Quantification*, 9 (4):1345–1380, ???? 2021. CODEN SJUQA3. ISSN 2166-2525.

Zhang:2025:CIP

[ZWXZ25] Tan Zhang, Zhongjian Wang, Jack Xin, and Zhiwen Zhang. A convergent interacting particle method for computing KPP front speeds in random flows. *SIAM/ASA Journal on Uncertainty Quantification*, 13(2):639–678, ???? 2025. CODEN SJUQA3. ISSN 2166-2525. URL https://epubs.siam.org/doi/10.1137/23M1604564.