

A Complete Bibliography of Publications in *Communications of the AMS*: 2020–2029

Nelson H. F. Beebe
University of Utah
Department of Mathematics, 110 LCB
155 S 1400 E RM 233
Salt Lake City, UT 84112-0090
USA

Tel: +1 801 581 5254

E-mail: beebe@math.utah.edu, beebe@acm.org,
beebe@computer.org (Internet)
WWW URL: <https://www.math.utah.edu/~beebe/>

13 August 2025
Version 1.00

Title word cross-reference

$B + B + t$ [33]. C^0 [37]. $K(1)$ [14]. $L^2(\Gamma \setminus G)$ [23]. L^∞ [9]. $m = 2$ [19]. $f \downarrow_{\mathcal{N}}$ [15]. p [36]. -equivariant [3]. -local [14]. 1D [30]. 4-manifolds [3]. algebraic [4]. algebraically [36]. algebras [13]. alternating [26]. Ampère [37]. amplituhedron [19]. analysis [38, 2]. Anderson [43]. Anosov [38]. Antiholomorphic [34]. approach [27]. arbitrary [29]. assuming [26]. Asymptotic [4]. Automorphic [24].	automorphisms [28, 18]. Bäcklund [7]. band [38]. based [40]. beyond [39]. bipartite [12]. bisections [11]. bootstrap [24]. boundary [35]. braid [25]. Calogero [47]. Catalan [31]. centroaffine [7]. chaos [32]. closed [36]. clusters [19]. codimension [30]. coefficients [48]. Cohen [45]. cohomology [36]. Colored [20]. concordance [10]. conditions [9]. conformal [24]. conjecture [33, 26]. connectivity [35]. contact [38]. continuation [48]. continuum [47]. convergence [26]. convex [37, 40]. convexity [37, 27]. Conze [29]. correspondences [34]. critical [47]. cubic [1, 30]. curve [35]. curves [7, 22].
---	---

descent [40]. deterministic [39].
 dichotomy [41]. Different [28]. dimension
 [42]. dimensional [2]. domains [37].
 duality [9]. dynamical [32, 8].
 eigenfunctions [23]. Eigenvalue [9, 2].
 Eisenstein [49]. energy [42]. enforcing
 [37]. enveloping [13]. equation [7, 37, 30].
 equations [13]. equivariant [3]. Erdos
 [33, 26]. Ergodic [41]. error [8, 2].
 Eulerian [19]. existence [45]. expansions
 [42]. Expressive [22].
 fast [39, 5]. fast-slow [39]. fermionic [20].
 fields [36]. First [44, 17]. first-passage
 [17]. flows [38, 41]. focusing [30]. forms
 [3]. framework [8]. Friendly [11]. fronts
 [6]. functions [20].
 Gap [1, 46]. generalization [2]. Geodesic
 [17]. geometric [27]. geometry [7].
 Gevrey [48]. Gordon [30]. gradient [40].
 graph [35]. graphs [12, 28, 11, 1]. Gromov
 [35]. Grothendieck [14]. group [13].
 groups [44]. growth [16].
 Hardy [26]. high [2]. Higher [14, 23, 41].
 Hochschild [36]. homeomorphism [44].
 homology [36]. homomorphisms [28].
 hyperbolic [18]. hypersimplex [19].
 II [15]. interior [37]. Intersection [3].
 invariant [3].
 Kazhdan [25]. Klein [30]. knots [10].
 Lamé [7]. last [32]. layer [2]. learning [8].
 least [37]. least-squares [37]. length [17].
 Lesigne [29]. limits [39]. line [47]. linear
 [46, 13, 35]. Littlewood [26]. local
 [14, 15, 38, 45, 18]. localization [43]. Low
 [42]. Lusztig [25].
 Macaulay [45]. machine [8]. Mahowald
 [3]. manifolds [3, 44]. Marcus [39]. mating
 [34]. matroids [25]. Maximum [12].
 method [37, 40]. Micro [38]. Micro-local
 [38]. mod [36]. mod- [36]. model [8].
 models [20, 47]. modules [15, 45]. Monge
 [37]. Moser [47]. motivic [36].
 networks [2]. neural [2]. Non [43, 45, 40].
 non-convex [40]. Non-existence [45].
 Non-stationary [43]. nonlinear [37].
 numbers [31, 19]. nutrients [16].
 one [30]. operators [48]. optimal [9].
 optimality [9]. optimization [40]. order
 [44]. ordering [10].
 partial [10]. partially [48]. passage
 [32, 17]. penalty [37]. percolation [32, 17].
 perspectives [28]. perversity [21]. Pin [3].
 planar [37]. polynomials [25]. posedness
 [47]. positive [23]. Positroid [31].
 presence [27]. prime [26]. priori [2].
 problems [9, 2]. processes [46].
 projective [46]. proof [33]. pulled [6].
 Quantum [28, 15]. quasi [13]. quasi-linear
 [13].
 random [11]. rank [23, 41]. ray [27].
 Realization [34]. regime [39]. Regularity
 [16]. relations [9]. Relative [21]. resolvent
 [42]. Ribbon [10]. rigidity [18, 44]. rings
 [45]. Ruelle [38].
 Scaling [47]. Scaling-critical [47].
 scenario [5]. Schrödinger [48, 2].
 selection [6]. Self [7]. Self-Bäcklund [7].
 semiadditive [14]. semiclassical [27].
 series [26]. sets [1]. shifted [17]. Signs
 [19]. slow [39]. Smooth [18, 37]. soliton
 [30]. solving [2]. SPDEs [46]. spectra
 [1, 24]. Spectral [46]. spectrum [38, 49].
 sphere [14]. Spheres [35]. spin [3]. spread
 [12]. spreading [5]. squares [37]. Stability

[32, 16, 30]. **stationary** [43]. **strictly** [37]. **structure** [38, 29, 13]. **subgroups** [15]. **subspace** [41]. **Superdiffusive** [39]. **Swarm** [40]. **Swarm-based** [40]. **symmetric** [20]. **Symmetries** [15]. **systems** [39, 29, 8]. **syzygies** [4].

Temperedness [23]. **theorems** [34]. **theory** [14]. **tilings** [19]. **toral** [18]. **transforms** [27]. **transport** [9]. **Tumor** [16]. **tuples** [26]. **two** [42, 2]. **two-layer** [2]. **Type** [15].

Ulrich [45]. **Unique** [48]. **Universal** [6, 13]. **unramified** [49].

vanishing [4]. **varieties** [4]. **vertex** [20]. **via** [13].

weights [17]. **well** [47]. **well-posedness** [47]. **Witt** [14].

X [27]. **X-ray** [27].

References

Kollar:2021:GSS

- [1] Alicia Kollár and Peter Sarnak. Gap sets for the spectra of cubic graphs. *Communications of the AMS*, 1(1):1–38, October 2021. ISSN 2692-3688.

Lu:2022:PGE

- [2] Jianfeng Lu and Yulong Lu. A priori generalization error analysis of two-layer neural networks for solving high dimensional Schrödinger eigenvalue problems. *Communications of the AMS*, 2(1):1–21, January 2022. ISSN 2692-3688.

Hopkins:2022:IFS

- [3] Michael Hopkins, Jianfeng Lin, Xiaolin Danny Shi, and Zhouli Xu. In-

tersection forms of spin 4-manifolds and the $\text{Pin}(2)$ -equivariant Mahowald invariant. *Communications of the AMS*, 2(2):22–132, February 2022. ISSN 2692-3688.

Park:2022:AVS

- [4] Jinhyung Park. Asymptotic vanishing of syzygies of algebraic varieties. *Communications of the AMS*, 2(3):133–148, June 2022. ISSN 2692-3688.

He:2022:FSS

- [5] Siming He, Eitan Tadmor, and Andrej Zlato. On the fast spreading scenario. *Communications of the AMS*, 2(4):149–171, July 2022. ISSN 2692-3688.

Avery:2022:USP

- [6] Montie Avery and Arnd Scheel. Universal selection of pulled fronts. *Communications of the AMS*, 2(5):172–231, July 2022. ISSN 2692-3688.

Bialy:2022:SBC

- [7] Misha Bialy, Gil Bor, and Serge Tabachnikov. Self-Bäcklund curves in centroaffine geometry and Lamé’s equation. *Communications of the AMS*, 2(6):232–282, August 2022. ISSN 2692-3688.

Levine:2022:FML

- [8] Matthew Levine and Andrew Stuart. A framework for machine learning of model error in dynamical systems. *Communications of the AMS*, 2(7):283–344, October 2022. ISSN 2692-3688.

Bungert:2022:EPO

- [9] Leon Bungert and Yury Korolev. Eigenvalue problems in L^∞ : optimality conditions, duality, and relations with optimal transport. *Communications of the AMS*, 2(8):345–373, October 2022. ISSN 2692-3688.

Agol:2022:RCK

- [10] Ian Agol. Ribbon concordance of knots is a partial ordering. *Communications of the AMS*, 2(9):374–379, December 2022. ISSN 2692-3688.

Ferber:2022:FBR

- [11] Asaf Ferber, Matthew Kwan, Bhargav Narayanan, Ashwin Sah, and Mehtaab Sawhney. Friendly bisections of random graphs. *Communications of the AMS*, 2(10):380–416, December 2022. ISSN 2692-3688.

Breen:2022:MSG

- [12] Jane Breen, Alex W. N. Riasanovsky, Michael Tait, and John Urschel. Maximum spread of graphs and bipartite graphs. *Communications of the AMS*, 2(11):417–480, December 2022. ISSN 2692-3688.

Linares:2023:SGQ

- [13] Pablo Linares, Felix Otto, and Markus Tempelmayr. The structure group for quasi-linear equations via universal enveloping algebras. *Communications of the AMS*, 3(1):1–64, January 2023. ISSN 2692-3688.

Carmeli:2023:HSG

- [14] Shachar Carmeli and Allen Yuan. Higher semiadditive Grothendieck–Witt theory and the $K(1)$ -local sphere. *Communications of the AMS*, 3(2):65–111, March 2023. ISSN 2692-3688.

Edie-Michell:2023:TIQ

- [15] Cain Edie-Michell. Type II quantum subgroups of $\int\downarrow_{\mathcal{N}}$. I: Symmetries of local modules. *Communications of the AMS*, 3(3):112–165, May 2023. ISSN 2692-3688.

Jacobs:2023:TGN

- [16] Matt Jacobs, Inwon Kim, and Jiajun Tong. Tumor growth with nutrients: Regularity and stability. *Communications of the AMS*, 3(4):166–208, May 2023. ISSN 2692-3688.

Krishnan:2023:GLS

- [17] Arjun Krishnan, Firas Rassoul-Agha, and Timo Seppäläinen. Geodesic length and shifted weights in first-passage percolation. *Communications of the AMS*, 3(5):209–289, May 2023. ISSN 2692-3688.

Kalinin:2023:SLR

- [18] Boris Kalinin, Victoria Sadovskaya, and Zhenqi Wang. Smooth local rigidity for hyperbolic toral automorphisms. *Communications of the AMS*, 3(6):290–328, June 2023. ISSN 2692-3688.

Parisi:2023:AHS

- [19] Matteo Parisi, Melissa Sherman-Bennett, and Lauren Williams. The $m = 2$ amplituhedron and the hypersimplex: Signs, clusters, tilings, Eulerian numbers. *Communications of the AMS*, 3(7):329–399, July 2023. ISSN 2692-3688.

Aggarwal:2023:CFV

- [20] Amol Aggarwal, Alexei Borodin, and Michael Wheeler. Colored fermionic vertex models and symmetric functions. *Communications of the AMS*, 3(08):400–630, August 2023. ISSN 2692-3688.

Hansen:2023:RP

- [21] David Hansen and Peter Scholze. Relative perversity. *Communications of the AMS*, 3(9):631–668, August 2023. ISSN 2692-3688.

- [22] Sergey Fomin and Eugenio Shustin. Expressive curves. *Communications of the AMS*, 3(10):669–743, August 2023. ISSN 2692-3688.
- [23] Sam Edwards and Hee Oh. Temperedness of $L^2(\Gamma \setminus G)$ and positive eigenfunctions in higher rank. *Communications of the AMS*, 3(11):744–778, September 2023. ISSN 2692-3688.
- [24] Petr Kravchuk, Dalimil Mazá, and Sridip Pal. Automorphic spectra and the conformal bootstrap. *Communications of the AMS*, 4(1):1–63, January 2024. ISSN 2692-3688.
- [25] Luis Ferroni and Matt Larson. Kazhdan–Lusztig polynomials of braid matroids. *Communications of the AMS*, 4(2):64–79, January 2024. ISSN 2692-3688.
- [26] Terence Tao. The convergence of an alternating series of Erdős, assuming the Hardy–Littlewood prime tuples conjecture. *Communications of the AMS*, 4(03):80–96, February 2024. ISSN 2692-3688.
- [27] András Vasy. A semiclassical approach to geometric X-ray transforms in the presence of convexity. *Communications of the AMS*, 4(4):97–116, February 2024. ISSN 2692-3688.
- [28] Matthew Daws. Quantum graphs: Different perspectives, homomorphisms and quantum automorphisms. *Communications of the AMS*, 4(5):117–181, February 2024. ISSN 2692-3688.
- [29] Asgar Jamneshan, Or Shalom, and Terence Tao. The structure of arbitrary Conze–Lesigne systems. *Communications of the AMS*, 4(6):182–229, February 2024. ISSN 2692-3688.
- [30] Jonas Lührmann and Wilhelm Schlag. On codimension one stability of the soliton for the 1D focusing cubic Klein–Gordon equation. *Communications of the AMS*, 4(7):230–356, February 2024. ISSN 2692-3688.
- [31] Pavel Galashin and Thomas Lam. Positroid Catalan numbers. *Communications of the AMS*, 4(8):357–386, April 2024. ISSN 2692-3688.
- [32] Shirshendu Ganguly and Alan Hammond. Stability and chaos in dynamical last passage percolation. *Communications of the AMS*, 4(9):387–479, June 2024. ISSN 2692-3688.
- [33] Bryna Kra, Joel Moreira, Florian Richter, and Donald Robertson. A proof of Erdős’s $B + B + t$ conjecture. *Communications of the AMS*, 4(10):480–494, August 2024. ISSN 2692-3688.
- [34] Mikhail Lyubich, Jacob Mazon, and Sabyasachi Mukherjee. Antiholomorphic correspondences and mating I: Realization theorems. *Communications of the*

AMS, 4(11):495–547, August 2024. ISSN 2692-3688.

Lu:2024:SBG

Wright:2024:SCG

- [35] Alex Wright. Spheres in the curve graph and linear connectivity of the Gromov boundary. *Communications of the AMS*, 4(12):548–577, September 2024. ISSN 2692-3688.

Dundas:2024:HHM

- [36] Bjørn Dundas, Michael Hill, Kyle Ormsby, and Paul Østvær. Hochschild homology of mod- p motivic cohomology over algebraically closed fields. *Communications of the AMS*, 4(13):578–606, September 2024. ISSN 2692-3688.

Brenner:2024:NLS

- [37] Susanne Brenner, Li yeng Sung, Zhiyu Tan, and Hongchao Zhang. A non-linear least-squares convexity enforcing C^0 interior penalty method for the Monge–Ampère equation on strictly convex smooth planar domains. *Communications of the AMS*, 4(14):607–640, October 2024. ISSN 2692-3688.

Faure:2024:MLA

- [38] Frédéric Faure and Masato Tsujii. Micro-local analysis of contact Anosov flows and band structure of the Ruelle spectrum. *Communications of the AMS*, 4(15):641–745, November 2024. ISSN 2692-3688.

Chevyrev:2024:SLB

- [39] Ilya Chevyrev, Alexey Korepanov, and Ian Melbourne. Superdiffusive limits beyond the Marcus regime for deterministic fast-slow systems. *Communications of the AMS*, 4(16):746–786, November 2024. ISSN 2692-3688.

- [40] Jingcheng Lu, Eitan Tadmor, and Anil Zengino lu. Swarm-based gradient descent method for non-convex optimization. *Communications of the AMS*, 4(17):787–822, December 2024. ISSN 2692-3688.

Kim:2025:EDS

- [41] Dongryul Kim, Hee Oh, and Yahui Wang. Ergodic dichotomy for subspace flows in higher rank. *Communications of the AMS*, 5(1):1–47, February 2025. ISSN 2692-3688.

Christiansen:2025:LER

- [42] T. Christiansen and K. Datchev. Low energy resolvent expansions in dimension two. *Communications of the AMS*, 5(2):48–80, April 2025. ISSN 2692-3688.

Gorodetski:2025:NSA

- [43] Anton Gorodetski and Victor Kleptsyn. Non-stationary Anderson localization. *Communications of the AMS*, 5(3):81–143, April 2025. ISSN 2692-3688.

Kim:2025:FOR

- [44] Sang hyun Kim, Thomas Koberda, and J. de la Nuez González. First order rigidity of homeomorphism groups of manifolds. *Communications of the AMS*, 5(4):144–194, May 2025. ISSN 2692-3688.

Iyengar:2025:NEU

- [45] Srikanth Iyengar, Linqun Ma, Mark Walker, and Ziquan Zhuang. Non-existence of Ulrich modules over Cohen–Macaulay local rings. *Communications of the AMS*, 5(5):195–208, May 2025. ISSN 2692-3688.

Hairer:2025:SGP

- [46] Martin Hairer and Tommaso Rosati. Spectral gap for projective processes of linear SPDEs. *Communications of the AMS*, 5(3):209–283, June 2025. ISSN 2692-3688.

Killip:2025:SCW

- [47] Rowan Killip, Thierry Laurens, and Monica Vi an. Scaling-critical well-posedness for continuum Calogero–Moser models on the line. *Communications of the AMS*, 5(7):284–320, June 2025. ISSN 2692-3688.

Filippas:2025:UCS

- [48] Spyridon Filippas, Camille Laurent, and Matthieu Léautaud. Unique continuation for Schrödinger operators with partially Gevrey coefficients. *Communications of the AMS*, 5(8):321–391, July 2025. ISSN 2692-3688.

Kazhdan:2025:UES

- [49] David Kazhdan and Andrei Okounkov. On the unramified Eisenstein spectrum. *Communications of the AMS*, 5(??):392–456, August 2025. ISSN 2692-3688.