A Complete Bibliography of Publications in *Archive of Numerical Software*

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References

Alns:2015:FPV

[ABH+15] Martin Alnæs, Jan Blechta, Johan Hake, August Johansson, Benjamin Kehlet, Anders Logg, Chris Richardson, Johannes Ring, Marie E. Rognes, and Garth N. Wells. The FEniCS Project Version 1.5. *Archive of Numerical Software*, 3(100):9–23, 2015. CODEN ???? ISSN 2197-8263. URL https://journals.ub.uni-heidelberg.de/index.php/ans/article/view/20553.

Alkmper:2016:DAM

[ADKN16] Martin Alkämper, Andreas Dedner, Robert Klöfkorn, and Martin Nolte. The DUNE–ALUGrid module. *Archive of Numerical Software*, 4(1):1–28, 2016. CODEN ???? ISSN 2197-8263. URL `https://journals.ub.uni-heidelberg.de/index.php/ans/article/view/23252`.

Alkmper:2017:UDA

[AL17] Martin Alkämper and Andreas Langer. Using DUNE-ACFem for non-smooth minimization of bounded variation functions. *Archive of Numerical Software*, 5(1):3–19, 2017. CODEN ???? ISSN 2197-8263. URL `https://journals.ub.uni-heidelberg.de/index.php/ans/article/view/27475`.

Blatt:2016:DUN

[BBD+16] Markus Blatt, Ansgar Burchardt, Andreas Dedner, Christian Engwer, Jorrit Fahlke, Bernd Flemisch, Christoph Gersbacher, Carsten Gräser, Felix Gruber, Christoph Grüninger, Dominic Kempf, Robert Klöfkorn, Tobias Malkmus, Steffen Müthing, Martin Nolte, Marian Piatkowski, and Oliver Sander. The Distributed and Unified Numerics Environment, Version 2.4. *Archive of Numerical Software*, 4(100):13–29, 2016. CODEN ???? ISSN 2197-8263. URL `https://journals.ub.uni-heidelberg.de/index.php/ans/article/view/26526`.

Bangerth:2015:DLV

[BHH+15] Wolfgang Bangerth, Timo Heister, Luca Heltai, Guido Kanschat, Martin Kronbichler, Matthias Maier, Bruno Turcksin, and Toby Young. The Dealii library, version 8.2. *Archive of Numerical Software*, 3(100):1–8, 2015. CODEN ???? ISSN 2197-8263. URL `https://journals.ub.uni-heidelberg.de/index.php/ans/article/view/18031`.

Bangerth:2016:DIL

[BHH+16] Wolfgang Bangerth, Timo Heister, Luca Heltai, Guido Kanschat, Martin Kronbichler, Matthias Maier, and Bruno Turcksin. The `deal.II` library, version 8.3. *Archive of Numerical Software*, 4(100):1–11, 2016. CODEN ???? ISSN 2197-8263. URL `https://journals.ub.uni-heidelberg.de/index.php/ans/article/view/23122`.

Carraro:2016:IEF

[CW16] Thomas Carraro and Sven Wetterauer. On the implementation of the eXtended Finite Element Method (XFEM) for interface problems. *Archive of Numerical Software*, 4(2):1–23, 2016. CODEN ???? ISSN 2197-8263. URL `https://journals.ub.uni-heidelberg.de/index.php/ans/article/view/22317`.

Dedner:2017:DFD

[DGKM17] Andreas Dedner, Stefan Girke, Robert Klöfkorn, and Tobias Malkmus. The DUNE-FEM-DG module. *Archive of Numerical Software*, 5(1):21–61, 2017. CODEN ???? ISSN 2197-8263. URL `https://journals.ub.uni-heidelberg.de/index.php/ans/article/view/28602`.

Dedner:2017:AEW

[DR17] Andreas Dedner and Alastair J. Radcliffe. Asynchronous evaluation within parallel environments of coupled finite and boundary element schemes for the simulation of multiphysics problems. *Archive of Numerical Software*, 5(1):63–94, 2017. CODEN ???? ISSN 2197-8263. URL `https://journals.ub.uni-heidelberg.de/index.php/ans/article/view/29042`.

Engwer:2017:IFD

[EGMS17] Christian Engwer, Carsten Gräser, Steffen Müthing, and Oliver Sander. The interface for functions in the `dune-functions` module. *Archive of Numerical Software*, 5(1):95–109, 2017. CODEN ???? ISSN 2197-8263. URL `https://journals.ub.uni-heidelberg.de/index.php/ans/article/view/27683`.

Gruber:2017:DDL

[GKM17] Felix Gruber, Angela Klewinghaus, and Olga Mula. The DUNE-DPG library for solving pdes with discontinuous Petrov–Galerkin finite elements. *Archive of Numerical Software*, 5(1):111–127, 2017. CODEN ???? ISSN 2197-8263. URL `https://journals.ub.uni-heidelberg.de/index.php/ans/article/view/27719`.

Goll:2017:DDE

[GWW17] Christian Goll, Thomas Wick, and Winnifried Wollner. DOpElib: Differential equations and optimization environment; a goal oriented software library for solving PDEs and optimization problems with PDEs. *Archive of Numerical Software*, 5(2):1–14, 2017. CODEN ???? ISSN 2197-8263. URL `https://journals.ub.uni-heidelberg.de/index.php/ans/article/view/11815`.

Heltai:2014:FCI

[HRC14] Luca Heltai, Saswati Roy, and Francesco Costanzo. A fully coupled immersed finite element method for fluid structure interaction via the Deal.II library. *Archive of Numerical Software*, 2(1):1–27, 2014. CODEN ???? ISSN 2197-8263. URL `https://journals.ub.uni-heidelberg.de/index.php/ans/article/view/10946`.

Kane:2017:UDF

[Kan17] Birane Kane. Using `Dune-Fem` for adaptive higher order discontinuous Galerkin methods for strongly heterogeneous two-phase flow in porous media. *Archive of Numerical Software*, 5(1):129–149, 2017. CODEN ???? ISSN 2197-8263. URL `https://journals.ub.uni-heidelberg.de/index.php/ans/article/view/28068`.

Kempf:2017:STS

[KK17] Dominic Kempf and Timo Koch. System testing in scientific numerical software frameworks using the example of Dune. *Archive of Numerical Software*, 5(1):151–168, 2017. CODEN ???? ISSN 2197-8263. URL `https://journals.ub.uni-heidelberg.de/index.php/ans/article/view/27447`.

Lubkoll:2017:FIB

[Lub17] Lars Lubkoll. FunG — invariant-based modeling. *Archive of Numerical Software*, 5(1):169–191, 2017. CODEN ???? ISSN 2197-8263. URL `https://journals.ub.uni-heidelberg.de/index.php/ans/article/view/27477`.

Milk:2017:EDD

[MSL17] Rene Milk, Felix Tobias Schindler, and Tobias Leibner. Extending DUNE: The `dune-xt` modules. *Archive of Numerical Software*, 5(1):193–216, 2017. CODEN ???? ISSN 2197-8263. URL `https://journals.ub.uni-heidelberg.de/index.php/ans/article/view/27720`.

Salgado:2013:FIC

[Sal13] Abner J. Salgado. A framework for the implementation of coupled multiphase flow problems using the deal.II library and its application to electrowetting. *Archive of Numerical Software*, 1(2):1–19, 2013. CODEN ???? ISSN 2197-8263. URL `https://journals.ub.uni-heidelberg.de/index.php/ans/article/view/10304`.

Sander:2017:EPD

[SBF17] Oliver Sander, Markus Blatt, and Bernd Flemisch. Editorial: Proceedings of the 3rd Dune User Meeting. *Archive of Numerical Software*, 5(1):1–2, 2017. CODEN ???? ISSN 2197-8263. URL `https://journals.ub.uni-heidelberg.de/index.php/ans/article/view/36872`.

Sander:2017:DFI

[SKSF17] Oliver Sander, Timo Koch, Natalie Schröder, and Bernd Flemisch. The Dune FoamGrid implementation for surface and network grids. *Archive of Numerical Software*, 5(1):217–244, 2017. CODEN ???? ISSN 2197-8263. URL `https://journals.ub.uni-heidelberg.de/index.php/ans/article/view/28490`.

Wick:2013:SMF

[Wic13] Thomas Wick. Solving monolithic fluid-structure interaction problems in arbitrary Lagrangian Eulerian coordinates with the deal.II library. *Archive of Numerical Software*, 1(1):1–19, 2013. CODEN ???? ISSN 2197-8263. URL `https://journals.ub.uni-heidelberg.de/index.php/ans/article/view/10305`.