

Inga Berre

Professor of Mathematics, University of Bergen
Department of Mathematics, Bergen, Norway
Email: Inga.Berre@uib.no
ORCID: 0000-0002-0212-7959

Education and Professional Career

1997-2000 Cand. Mag. (BSc), Mathematics, University of Bergen
2001-2001 Cand. Scient. (MSc), Computational Science, University of Bergen
2001-2005 Dr. Scient. (Ph.D.) Applied Mathematics (21.10.2005), University of Bergen
2006-2013 Associate Professor (100%), University of Bergen
2010-2019 Scientific advisor (20% position), Christian Michelsen Research/NORCE
2023-2024 Argyris Visiting Professorship, University of Stuttgart
2013- current position (100%)

Commitment, Appointments and Scientific Volunteer Jobs

2025-current Associate Editor, *Mathematics and Computers in Simulation* (MATCOM)
2023-current Editorial Board Member, *InterPore Journal*
2020-current Associate Editor, *Geothermal Energy*
2021-2029 The University Board, University of Bergen
2018-2029 Scientific Advisory Board, Collaborative Research Center SFB 1313, Uni. Stuttgart
2024-2028 Scientific Advisory Board, SFI Centre for Geophysical Forecasting, NTNU, Member
2024-2027 Scientific Advisory Council, GFZ Helmholtz Centre for Geosciences
2023-2027 Chair, National Assessment Committee for professor promotions in applied mathematics NTNU, UiB, UiO, UiT
2021-2027 International Expert Panel, Knowledge Programme on Effects of Mining (KEM), Dutch Ministry of Economic Affairs and Climate
2022-2026 Board, Norwegian Mathematical Society (deputy member)
2021-2026 Director, Center for Modeling of Coupled Subsurface Dynamics, University of Bergen (2.5 MEUR VISTA grant + 1.5 EUR UiB grant)
2022-2025 External Advisory Board, ERC Synergy project FEAR, ETH Zurich
2022-2023 President, Bergen Society for the Advancement of Science
2019-2023 Portfolio Board for Natural Science and Technology, Research Council of Norway
2021-2022 Chair, SIAM Activity Group on Geosciences
2019-2021 Co-chair, European Commission SET-Plan Deep Geothermal Implementation Working Group
2018-2021 Coordinator/Chair, EERA Joint Programme Geothermal
2017-2024 Program Committee, InterPore Annual Conference

Professional Awards, Offers and Recognitions

2026 Elisabeth Stephansen Lecture, Norwegian National Mathematics Meeting
2023 Argyris Visiting Professorship, SimTech Cluster of Excellence, University of Stuttgart
2021 10,000th ERC grantee, European Commission (Brussels, 6 May 2021)
2021 ERC Consolidator Grant MaPSI - Mathematical and Numerical Modelling of Process-Structure Interaction in Geothermal Fractured Geothermal Systems
2021 Lifetime Member, Association of ERC Grantees (AERG)
2017 Elected Member, Norwegian Academy of Technological Sciences
2011 Lauritz Meltzer Award for Young Researchers

Most important Publications (maximum 10)

(Peer reviewed journal articles / books / patents)

1. Zabegaev, Y., **Berre, I.**, & Keilegavlen, E. (2026). Data-driven linear solver selection and performance tuning for multiphysics simulations in porous media. *Computational Science and Engineering*
2. Lipovac, V., Duran, O., Keilegavlen, E., Radu, F. A., & **Berre, I.** (2024). Unified flash calculations with isenthalpic and isochoric constraints. *Fluid Phase Equilibria*
3. Stefansson, I., Keilegavlen, E., Halldórsdóttir, S., & **Berre, I.** (2021) Numerical Modelling of Convection-Driven Cooling, Deformation and Fracturing of Thermo-Poroelastic Media. *Transp Porous Med*
4. Keilegavlen, E., Duboeuf, L., Dichiarante, A. M., Halldórsdóttir, S., Stefansson, I., Naumann, M., ... & **Berre, I.** (2021). Hydro-mechanical simulation and analysis of induced seismicity for a hydraulic stimulation test at the Reykjanes geothermal field, Iceland. *Geothermics*
5. Stefansson, I., **Berre, I.**, & Keilegavlen, E. (2021). A fully coupled numerical model of thermo-hydro-mechanical processes and fracture contact mechanics in porous media. *Computer Methods in Applied Mechanics and Engineering*
6. Berge, R. L., **Berre, I.**, Keilegavlen, E., Nordbotten, J. M., & Wohlmuth, B. (2020). Finite volume discretization for poroelastic media with fractures modeled by contact mechanics. *International Journal for Numerical Methods in Engineering*
7. **Berre, I.**, Stefansson, I., & Keilegavlen, E. (2020). Fault slip in hydraulic stimulation of geothermal reservoirs: Governing mechanisms and process-structure interaction. *The Leading Edge [C-M-WO-P-FA]*
8. **Berre, I.**, Boon, W. M., Flemisch, B., Fumagalli, A., Gläser, D., Keilegavlen, E., ... & Burbulla, S. (2020). Verification benchmarks for single-phase flow in three-dimensional fractured porous media. *Advances in Water Resources*
9. Keilegavlen, E., Berge, R., Fumagalli, A., Starnoni, M., Stefansson, I., Varela, J., & **Berre, I.** (2020). PorePy: an open-source software for simulation of multiphysics processes in fractured porous media. *Computational Geosciences*
10. **Berre, I.**, Doster, F., & Keilegavlen, E. (2019). Flow in fractured porous media: A review of conceptual models and discretization approaches. *Transport in Porous Media*