

# References

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## **Presentations**

W. Bangerth, and M. Fehling, hp-adaptive Finite Element Methods for Large-Scale Parallel Computations, SIAM Conference on Parallel Processing for Scientific Computing 2022 (PP22), virtual conference, February 23 - 26, 2022.

J. Dannberg, F. S. Lacombe, R. Gassmoeller, C. J. Sprain, and D. Thallner, How subduction history and lowermost mantle viscosity control the evolution of thermochemical structures at the core-mantle boundary. Invited oral presentation at the Earth's History, Dynamics, and Planetary Habitability workshop in Sundvollen, Norway (11/2022)

J. Dannberg, F. S. Lacombe, R. Gassmoeller, C. J. Sprain, and D. Thallner, How subduction history and lowermost mantle viscosity control the thermal and chemical structure of Earth's deep interior. Invited oral presentation at the AGU Fall Meeting, Chicago (12/2022)

J. Dannberg, D. Thallner, R. Gassmoeller, C. Sprain, F. LaCombe, and C. Ritchie, Coupling Models of Plate Motion History, Mantle Convection and the Geodynamo to explain long-term Geomagnetic Field Behavior, EGU General Assembly 2023, Vienna, Austria, 24–28 Apr 2023, EGU23-9490, <https://doi.org/10.5194/egusphere-egu23-9490>, 2023.

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M. Fehling, P. Munch, and W. Bangerth, Global-coarsening multigrid for hp-adaptive finite element computations, SIAM Conference on Computational Science and Engineering 2023 (CSE23), Amsterdam, Netherlands, February 26 - March 3, 2023.

R. Gassmoeller, D. Thallner, J. Dannberg, C. Sprain, F. LaCombe, C. Ritchie, Connecting Earth's Mantle and Core: Influence of Heterogeneous Mantle Heat Flux on the Magnetic Field in Numerical Models. Poster presentation at the Gordon Research Conference & Seminar (06/2023)

H. Matsui, Y. Nishida, M. Matsushima, A. Kumamoto, and Y. Katoh, Magnetic Reynolds number range to sustain dipolar magnetic field in geodynamo simulations with different inner core sizes, AGU fall meeting 2022, D132B-0013, Chicago, IL, (12./2022).

D. Thallner, Coupling Mantle Convection and Geodynamo Simulations to Understand the Influence of Mantle Dynamics on the Generation of Earth's Magnetic Field Throughout the Plate Tectonic Cycle. MagIC Workshop 2023 - Scripps Institute of Oceanography, March 2023, UCSD, La Jolla, CA, USA.

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D. Thallner, S. Sprain, J. Dannberg, R. Gassmoeller, C. Davies, D. Meduri, A. Biggin, C. Ritchie, F. LaCombe, R. Bono, and Y. Engbers, Quantifying the Influence of Mantle Convection on Extreme Anomalies in long-term Geomagnetic Field Behavior, AGU Fall Meeting, 11-16 December 2022, Chicago, USA.