

Juliane Dannberg

⌘ Education

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| 2012 – 2016 | Ph.D. in Geophysics, GFZ German Research Centre for Geosciences/University of Potsdam, Germany, on “Dynamics of mantle plumes: Linking scales and coupling physics”
Advisors: Stephan V. Sobolev and Volker John |
| 2007 – 2012 | Diplom (B.Sc. & M.Sc.), Geophysics, Friedrich-Schiller-University Jena, Germany (Grade 1.0) |

⌘ Professional Appointments

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| since 8/2019 | Assistant Professor at University of Florida, Gainesville, USA |
| 7/2018 – 9/2018 | Visiting Scholar at Cambridge University, UK |
| 2018 – 2019 | Assistant Project Scientist at University of California, Davis, USA |
| 2017 – 2018 | Postdoctoral Fellow at Colorado State University, Fort Collins, USA |
| 2016 – 2017 | Postdoctoral Research Associate at Texas A&M University, College Station, USA |
| 2015 – 2016 | Research Assistant at Texas A&M University, College Station, USA |

⌘ Publications in Refereed Journals

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| 2023 | Monaco, M., Dannberg, J. , Gassmoeller, R. and Pugh, S. Linking geodynamic models of basalt segregation in mantle plumes to the X-Discontinuity observed beneath hotspots. <i>Journal of Geophysical Research: Solid Earth</i> , 128 , e2022JB025036. |
| 2023 | Saxena, A., Dannberg, J. , Gassm  ller, R., Fraters, M., Heister, T. and Styron, R. High-Resolution Mantle Flow Models Reveal Importance of Plate Boundary Geometry and Slab Pull Forces on Generating Tectonic Plate Motions. <i>Journal of Geophysical Research: Solid Earth</i> , 128 , e2022JB025877. |
| 2023 | Myhill, R., Cottaar, S., Heister, T., Rose, I., Unterborn, C., Dannberg, J. and Gassmoeller, R. BurnMan—a Python toolkit for planetary geophysics, geochemistry and thermodynamics. <i>Journal of Open Source Software</i> , 8(87) , p.5389. |
| 2023 | Heron, P.J., G  n, E., Shephard, G.E., Dannberg, J. , Gassm  ller, R., Martin, E., Sharif, A., Pysklywec, R.N., Nance, R.D. and Murphy, J.B. The role of subduction in the formation of Pangean oceanic large igneous provinces. <i>Geological Society, London, Special Publications</i> , 542(1) , pp.SP542-2023. |
| 2022 | Dannberg, J. , Gassm  ller, R., Li, R., Lithgow-Bertelloni, C., Stixrude, L. An entropy method for geodynamic modelling of phase transitions: capturing sharp and broad transitions in a multiphase assemblage. <i>Geophys. J. Int.</i> , 231(3) , 1833–1849. |
| 2022 | van Zelst, I., Crameri, F., Pusok, A.E., Glerum, A., Dannberg, J. and Thieulot, C. 101 Geodynamic modelling: How to design, interpret, and communicate numerical studies of the solid Earth. <i>Solid Earth</i> , 13 , 583–637. |

- 2021 **Dannberg, J.**, Myhill, R., Gassmüller, R., Cottaar, S. The morphology, evolution and seismic visibility of partial melt at the core-mantle boundary: Implications for ULVZs. *Geophys. J. Int.*, **227**(2), 1028–1059.
- 2021 Bredow, E., Steinberger, B., Gassmüller, R., **Dannberg, J.**, Mantle convection and possible mantle plumes beneath Antarctica – insights from geodynamic models and implications for topography. *Geological Society, London, Memoirs*, **56**, <https://doi.org/10.1144/M56-2020-2>.
- 2020 Leshner, C., **Dannberg, J.**, et al. Iron isotope fractionation at the core-mantle boundary by thermodiffusion. *Nature Geoscience*, **13**, 382–386.
- 2020 Gassmüller, R., **Dannberg, J.**, Bangerth, W., Heister, T., Myhill, R. On Formulations of Compressible Mantle Convection. *Geophys. J. Int.*, **221**(2), 1264–1280.
- 2019 **Dannberg, J.**, Gassmüller, R., Grove, R., Heister, T. A new formulation for coupled magma/mantle dynamics. *Geophys. J. Int.*, **219**(1), 94–107.
- 2018 **Dannberg, J.**, Gassmüller, R., Chemical trends in ocean islands explained by plume– slab interaction. *Proceedings of the National Academy of Sciences*, **115**(17), 4351–4356.
- 2017 Bredow, E., Steinberger, B., Gassmüller, R., **Dannberg, J.**, How plume-ridge interaction shapes the crustal thickness pattern of the Réunion hotspot track. *Geochem. Geophys. Geosyst.*, **18**, 2930–2948.
- 2017 **Dannberg, J.**, Eilon, Z., Faul, U., Gassmüller, R., Moulik, P., Myhill, R., The Importance of Grain Size to Mantle Dynamics and Seismological Observations. *Geochem. Geophys. Geosyst.*, **18**, 3034–3061.
- 2017 Heister, T., **Dannberg, J.**, Gassmüller, R., Bangerth, W., High Accuracy Mantle Convection Simulation through Modern Numerical Methods. II: Implications from Solving Realistic Problems. *Geophys. J. Int.*, **210**(2), 833–851.
- 2016 **Dannberg, J.**, Heister, T. Compressible magma/mantle dynamics: 3-D, adaptive simulations in ASPECT. *Geophys. J. Int.*, **207**(3), 1343–1366.
- 2016 Gassmüller, R., **Dannberg, J.**, Bredow, E., Steinberger, B., Torsvik, T.H. Major influence of plume-ridge interaction, lithosphere thickness variations, and global mantle flow on hotspot volcanism—The example of Tristan. *Geochem. Geophys. Geosyst.*, **17**, 1454–1479.
- 2015 **Dannberg, J.**, Sobolev, S.V. Low-buoyancy thermochemical plumes resolve controversy of classical mantle plume concept. *Nature Communications* **6**.

⌘ Other Publications

- 2023 Bangerth, W., **Dannberg, J.**, Fraters, M., Gassmüller, R., Glerum, A., Heister, T., Myhill, R. & Naliboff, J. ASPECT v2.5.0. [software]. <https://doi.org/10.5281/zenodo.8200213>.
- 2022 Bangerth, W., **Dannberg, J.**, Fraters, M., Gassmüller, R., Glerum, A., Heister, T., Myhill, R. & Naliboff, J. ASPECT v2.4.0. [software]. <https://doi.org/10.5281/zenodo.6903424>.
- 2021 Bangerth, W., **Dannberg, J.**, Gassmüller, R., & Heister, T. ASPECT v2.3.0. [software]. <https://doi.org/10.5281/zenodo.5131909>.
- 2021 **Dannberg, J.** “Thermodynamics and Geodynamics: The perfect couple? Part II”, *blog of the Geodynamics Division of the European Geosciences Union* (<https://blogs.egu.eu/divisions/gd/2021/10/13/thermodynamics-and-geodynamics-the-perfect-couple-part-ii/>).
- 2020 Bangerth, W., **Dannberg, J.**, Gassmüller, R., & Heister, T. ASPECT v2.2.0. [software]. <https://doi.org/10.5281/zenodo.3924604>.

- 2019 **Dannberg, J.** "Geodynamics 101: Magma dynamics", *blog of the Geodynamics Division of the European Geosciences Union*. (<https://blogs.egu.eu/divisions/gd/2019/09/25/magma-dynamics/>)
- 2019 Bangerth, W., **Dannberg, J.**, Gassmöller, R., & Heister, T. ASPECT v2.1.0 [software]. <https://doi.org/10.5281/zenodo.2653531>.
- 2018 As member of the CTSP Writing Committee. Whitepaper Reporting Outcomes from NSF-Sponsored Workshop: 'CTSP: Coupling of Tectonic and Surface Processes'. (https://csdms.colorado.edu/mediawiki/images/CTSP_WhitePaper_Final.pdf)
- 2018 Bangerth, W.; **Dannberg, J.**; Gassmoeller, R.; Heister, T., ASPECT v2.0.0 [software], doi:[10.5281/zenodo.1244587](https://doi.org/10.5281/zenodo.1244587).
- 2017 **Dannberg, J.**, Shephard, G. "On the influence of grain size in numerical modelling", *blog of the Geodynamics Division of the European Geosciences Union*. (<https://blogs.egu.eu/divisions/gd/2017/11/29/on-the-influence-of-grain-size-in-numerical-modelling/>)
- 2016 Bangerth, W., **Dannberg, J.**, Gassmöller, R., & Heister, T. Computational Modeling of Convection in the Earth's Mantle, *SIAM News*, **49**, 2.
- 2012 **Dannberg, J.**, Goepel, A., Jahr, T., Ude, M. und Viereck, M. "Geomagnetic characterization of the Volcanic Complex Gompertshausen in the Heldburger Gangschar", *commemorative publication on occasion of the 25th anniversary of the German Volcanological Society*.

⌘ Funded Research

- 2023 Co-PI of Subaward "**Computational Infrastructure for Geodynamics Phase IV**" (NSF Geoinformatics)
Anticipated: \$705,150
- 2022 Co-PI of Subaward "**Computational Infrastructure for Geodynamics Phase III**" (NSF Geoinformatics)
\$165,398
- 2021 Co-PI of "**CSEDI: Understanding the influence of mantle dynamics on the generation of Earth's magnetic field throughout the plate tectonics cycle**"
Anticipated: \$428,655
- 2019 Principal Investigator of "**Collaborative Research: Development and Application of a Framework for Integrated Geodynamic Earth Models**" (NSF-FRES)
Anticipated: \$1,216,619
- 2014 Cooperative Institute for Dynamic Earth Research (NSF CIDER) for the project "**Investigating mantle dynamics using a composite rheology with grain size evolution, tested using seismology**", \$3700
- 2014, 2015, 2016 Project "**Plume-Plate interaction in 3D mantle flow – Revealing the role of internal plume dynamics on global hot spot volcanism**" and two continuation proposals at the North-German Supercomputing Alliance
Computing time in CPU hours: 4.8 million (103,000 Euro), 3.3 million (70,460 Euro), 3.7 million (79,300 Euro)

⌘ Awards

- 2022/2023 **Distinguished Speaker** (Computational Infrastructure for Geodynamics Speaker Series)
- 2021 **Jason Morgan Early Career Award** of AGU's Tectonophysics Section
- 10/2017 KlarText – **Prize for Science Communication** awarded by the German foundation Klaus Tschira Stiftung

⌘ Invited Talks

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| 09/2023 | “Subducted Slabs, Mantle Plumes and Material Recycling in the Earth’s Interior: Insights from Geodynamic Modeling” in the School of the Earth, Ocean and Environment seminar at the University of South Carolina |
| 06/2023 | “Geodynamic Modeling of a Heterogeneous Lower Mantle: Implications for LLSVPs and ULVZs” at the Earth’s Interior Gordon Research Conference at Mt. Holyoke College, Massachusetts |
| 05/2023 | “Mantle plumes and Material Recycling in the Earth’s Interior: Insights from connecting geodynamic models to seismic observations” in the Bullard Seminar at the University of Cambridge, UK |
| 05/2023 | “Subducted Slabs, Mantle Plumes, and the Plate Tectonic Cycle” in the School of Geographical & Earth Sciences seminar at Glasgow University |
| 04/2023 | “Coupling Models of Plate Motion History, Mantle Convection and the Geodynamo to explain long-term Geomagnetic Field Behavior” at the EGU General Assembly, Vienna, Austria |
| 03/2023 | “Subducted Slabs, Mantle Plumes, and the Plate Tectonic Cycle” as part of the CIG Distinguished Speaker Series (presented in the Hewett Club Seminar at UC Riverside Earth and Planetary Sciences, the Earth Sciences Hybrid Seminar at SOEST/University of Hawai’i at Manoa, and the Department of Earth & Environmental Sciences at University of Ottawa) |
| 01/2023 | IRIS webinar on the “Dynamics and composition of mantle plumes: Insights from connecting geodynamic models to seismic observations” (virtual) |
| 12/2022 | “How subduction history and lowermost mantle viscosity control the thermal and chemical structure of Earth’s deep interior” at the AGU Fall Meeting, Chicago |
| 11/2022 | “The Plate Tectonic Cycle and Material Recycling in the Earth’s Interior: Insights from connecting geodynamic models to seismic observations” in the Department of Earth Sciences at ETH Zürich |
| 11/2022 | “How subduction history and lowermost mantle viscosity control the evolution of thermochemical structures at the core-mantle boundary” at the Earth’s History, Dynamics, and Planetary Habitability workshop in Sundvollen, Norway |
| 11/2022 | “Subducted Slabs, Mantle Plumes, and the Plate Tectonic Cycle” at Envisioning the Future of Geophysics: A Celebration of the Centennial of the Seismological Laboratory at the California Institute of Technology, Pasadena |
| 10/2022 | “Dynamics of Tectonic Plates, Subducted Slabs, and Mantle Plumes” in the Department of Earth, Environmental & Planetary Sciences at Brown University |
| 09/2022 | “Interactions between Mantle Convection, Plate Tectonics, and Material Recycling in the Earth’s Interior” in the Institute for Geophysics at UT Austin |
| 08/2022 | “Mantle plumes and their chemical composition: Insights from geodynamic modeling” at GEOMAR Helmholtz Centre for Ocean Research Kiel, Germany |
| 06/2022 | “Dynamics and composition of mantle plumes: Insights from connecting geodynamic models to seismic observations” at the SAGE/GAGE workshop in Pittsburgh |

- 03/2022 **"Mantle plumes and their interaction with tectonic plates: Insights from geodynamic modeling"** in the Department of Geology Colloquium at University of Georgia
- 11/2021 **"Modeling phase transitions in the Earth's mantle: Implications for partial melt at the core-mantle boundary and layering of convection"** in the Geophysics Colloquium at the University of Münster/Germany (virtual)
- 10/2021 **"Modeling phase transitions by coupling geodynamics and thermodynamics: Implications for partial melt at the core-mantle boundary and layering of convection"** in the Geodynamics Seminar at Columbia University/Lamont-Doherty Earth Observatory (virtual)
- 10/2021 **"Coupling of computational thermodynamics and fluid dynamics: Implications for partial melt at the core-mantle boundary and layering of convection"** in the GFD seminar series at ETH Zürich (virtual)
- 02/2021 **"The morphology, evolution and seismic visibility of partial melt at the core-mantle boundary: Implications for ULVZs"** at the Berkeley Seismo Lab (virtual)
- 12/2020 **"Quantifying the influence of an evolving mineral grain size on the characteristics of mantle flow"** at the AGU Fall Meeting (virtual)
- 10/2020 **"Mantle plumes and their interaction with tectonic plates: Insights from geodynamic modeling"** in the University of Miami's Rosenstiel School of Marine and Atmospheric Science Geotopics Seminar (virtual)
- 09/2020 **"Dynamics, evolution and seismic visibility of melting zones in the lowermost mantle"** at the Mini-Workshop on Feedbacks Between Mantle Composition, Structure, and Evolution (virtual)
- 07/2020 **"Dynamics, evolution and seismic visibility of melting zones in the lowermost mantle"** in the University of Kentucky Geophysics and Tectonics seminar (virtual)
- 03/2020 **"Plumes and their interaction with a heterogeneous mantle: Insights from geodynamic modeling"** in the Tectonics and Seismology Seminar at UCLA, Los Angeles, USA
- 12/2019 **"Mantle plumes and their interaction with tectonic plates: Insights from geodynamic modeling"** in the weekly seminar of the Institute of Geosciences, Friedrich-Schiller-University Jena, Germany
- 12/2019 **"Plume formation across scales: The influence of subducted slabs, chemical heterogeneities and a partially molten boundary layer"** at the AGU Fall Meeting, San Francisco, USA
- 11/2019 **"Numerical Modeling of Coupled Magma/Mantle Dynamics Using the Community Code ASPECT"** in the Applied and Numerical Analysis seminar at University of Florida, Gainesville, USA
- 08/2019 **"Modelling mantle convection with chemical and rheological heterogeneities"**, keynote talk at the Ada Lovelace Workshop on Modeling of Mantle and Lithosphere Dynamics, Siena, Italy
- 05/2019 **"Mantle plumes and their interaction with tectonic plates: Insights from geodynamic modeling"** at Goethe University Frankfurt, Germany
- 04/2019 **"Linking chemical trends in ocean islands to the complex interaction between starting plumes and the core-mantle boundary"** at the EGU General Assembly, Vienna, Austria

03/2019	"Mantle plumes and their interaction with tectonic plates: Insights from geodynamic modeling" at University of Delaware, Newark, Delaware, USA
01/2019	"Mantle plumes and their interaction with tectonic plates: Insights from geodynamic modeling" at University of Florida, Gainesville, Florida, USA
12/2018	"Convection Simulations Explain the Compositional Heterogeneity of Oceanic Island Chains" and "Modeling Melt Generation and Transport by Integrating Thermodynamic Models in Geodynamic Simulations Using the Community Code ASPECT" at the AGU Fall Meeting, Washington D.C., USA
11/2018	Guest lecture on "The importance of subduction history and mineral grain size evolution to mantle dynamics" at CEED – University of Oslo, Norway
08/2018	"Advances in the geodynamic modelling code ASPECT" , keynote talk at the German-Swiss Geodynamics Workshop 2018 in Noer, Germany
07/2018	"Chemical trends in ocean islands explained by plume–slab interaction" , research talk at the 16th Symposium of SEDI, Study of the Earth's Deep Interior, Edmonton, Canada
05/2018	CIG Webinar about "ASPECT 2.0: Improved architecture, new features" (with the ASPECT team)
01/2018	"Geodynamic modelling with ASPECT: Applications for magma/mantle dynamics, grain size evolution and chemical zonation in mantle plumes" in the Global Geophysics seminar, University College London, UK
10/2017	"Forward and inverse problems in geodynamic modelling: Part II -- Thermochemical Convection" in the Inverse Problems seminar at Colorado State University, Fort Collins, USA
09/2017	"Coupling mantle convection and melt migration: 3-D, adaptive simulations" in the MathLab Seminar at SISSA (Scuola Internazionale Superiore di Studi Avanzati), Trieste, Italy
09/2017	"Compressible magma/mantle dynamics: 3D adaptive simulations" at the SIAM Conference on Mathematical and Computational Issues in the Geosciences in Erlangen, Germany
09/2017	"Geodynamic models of coupled magma/mantle dynamics: Towards integrating thermodynamic data" in the Department of Geoscience Seminar at Aarhus University, Denmark
05/2017	„Geodynamic modeling with ASPECT: Applications for magma/mantle dynamics, grain size evolution and chemical zonation in mantle plumes" and ASPECT Hands-on Tutorial at UT Austin, Texas, USA
04/2017	„Compressible Magma/Mantle Dynamics: 3d, Adaptive Simulations in ASPECT" at the UC Davis Earth and Planetary Sciences Department Seminar Series in Davis, California, USA
04/2017	„Methods and Applications of the Finite-Element Software ASPECT in Geodynamics" in the Computer Science Colloquium at UC Boulder, Colorado (USA)
01/2017	"Coupling of computational thermodynamics and fluid dynamics – a magma/mantle dynamics perspective" at the CIDER Workshop on interoperability of modeling tools in Honolulu, USA

06/2016	"3D Numerical Modelling of Compressible Coupled Magma/Mantle Dynamics With Adaptive Mesh Refinement" as part of the Melt in the Mantle programme at the Isaac Newton Institute for Mathematical Science in Cambridge, UK
05/2016	"Magma dynamics and grain size evolution in mantle convection models: Numerical methods and applications" in the GFD seminar series at ETH Zürich, Switzerland
06/2014	"State of the art mantle convection modelling with ASPECT" in the seminar series of the GeoComputing group of LMU München, Germany
04/2014	"Geodynamic modeling of eclogite-bearing mantle plumes using ASPECT" in the CIG webinar as part of the presentation about "ASPECT: Science highlights"
11/2012	"Numerical modeling of thermo-chemical mantle plumes and their influence on dynamic topography" at the certificate award ceremony of the faculty of Chemistry and Earth Sciences of the University of Jena, Germany, awarded for the best diploma thesis of the year

⌘ Teaching

Fall 2023	Instructor for the class <i>Quantitative Methods in Earth Sciences</i> (GLY 4862/GLY 6862) at University of Florida, USA
Fall 2021, 2022	Instructor for the class <i>Introduction to Simulations and Computational Techniques for Earth Sciences</i> (GLY 4930/GLY 6932) at University of Florida, USA
7/2020	Co-Organizer and Instructor for the CIG <i>Tectonics Modeling Tutorial</i> (virtual, ~50 participants)
Spring 2020, 2021	Instructor for the class <i>Introduction to Geophysics</i> (GLY 4450/GLY 5255) at University of Florida, USA
8/2019	Co-Organizer of the <i>Computational Methods for PDEs Summer School</i> at Colorado State University, Fort Collins, CO, USA
11/2018	Instructor for the <i>ASPECT tutorial</i> at CEED – University of Oslo, Norway
6/2018	Instructor for the <i>ASPECT tutorial</i> at the CIG/CGU Meeting, Niagara Falls, Canada
5/2018	Instructor for the <i>ASPECT tutorial</i> at UC Davis, USA
1/2018	Instructor for the 2018 EON-ELSI Winter School in Earth-Life Sciences, January 22 - February 2, 2018, Earth-Life Science Institute, Tokyo Institute of Technology Tokyo, Japan
10/2017	Instructor for the Deep Earth Systems PhD Course " <i>Forging links between petrology and geophysics</i> ", October 2-13, 2017 Aarhus University, Aarhus, Denmark
6/2016	Instructor for the <i>ASPECT tutorial</i> at the CIG All Hands Meeting, Davis, USA
1/2016 – 5/2016	Co-Instructor (with W. Bangerth) for the class <i>Mathematical Modeling</i> (MATH 442) at Texas A&M University, USA
9/2014	Organizer and Instructor for the hands-on tutorial on " <i>ASPECT: a next-generation geodynamic modelling software</i> " at the Geomod conference in Potsdam, Germany
3/2013, 2014, 2015	Instructor for the course " <i>Computational Geodynamics</i> ", University of Potsdam, Germany

⌘ Mentorship/Student & Postdoc Supervision

PhD Students:	Martina Monaco (since 2021) Ranpeng Li (since 2021)
Member of graduate student Supervisory Committee for:	Han Byul “Aiden” Woo (2020–2021) Brian Kelly (since 2020) Carson Beattie (since 2021) Gabriel Johnston (since 2021) Liz Pesar (since 2021) Danilo Cruz (since 2021) Daniel Astudillo (since 2022) Laura Mulrooney (since 2022) Molly Anderson (2023)
Postdocs:	Kiran Chotalia (2020–2022) Arushi Saxena (2020–2023) Daniele Thallner (since 2022, co-supervised) Menno Fraters (since 2023)

⌘ Outreach

10/2020, 10/2022	Virtual visit to Herbert Ammons Middle School/Ponce de Leon Middle School in Miami-Dade County as part of the “Scientist in Every Florida School” program
12/2018	“Why Are the Pieces of Land in the Wide Water that Breathe out Fire and Smoke Made of Different Types of Rocks?”, talk in the Education session “The Up-Goer Five Challenge” at the AGU Fall Meeting (https://youtu.be/SAxO2nzhrvZ0)
6/2018	Invited talk “Ein Blick ins Innere der Erde – Wie Gesteins-bewegungen unseren Planeten formen” (Looking into the Earth’s Interior – How Moving Rocks Shape Our Planet) at Schule mit Wissenschaft Thüringen (School MIT Science), a workshop for high-school teachers organized by the MIT Club of Germany, Erfurt, Germany (https://youtu.be/Rh2yn5sxMeM)
2017	Dannberg, J. (2017). “Auf und Ab im Erdmantel” (Up and Down in the Earth's Mantle), <i>special supplement to the weekly journal “Die Zeit”</i> . (https://www.klartext-preis.de/meldungen/auf-und-ab-im-erdmantel/)

⌘ Professional Service

since 2023	Member of the Early Career/OSPA committee of AGU’s Tectonophysics Section
since 2020	Topical Editor of Solid Earth
since 2016	Principal Developer and Official Maintainer of the Open Source mantle convection code ASPECT
since 2014	Reviewer for SIAM Journal of Scientific Computing; Geochemistry, Geophysics, Geosystems; Gondwana Research; Geophysical Journal International; Physics of the Earth and Planetary Interiors; Journal of Geophysical Research: Solid Earth; Tectonophysics; Frontiers in Earth Science; Nature; Nature Geoscience; Nature Communications; Geophysical Research Letters; NSF EAR and NASA
2023	Member of the CIG Speakers Committee
2016, 2023	Session Convener at the EGU General Assembly
2018 – 2023	Member of the Expert Panel for the KlarText – Prize for Science Communication awarded by the German foundation Klaus Tschira Stiftung

2016 – 2022	Session Convener at the AGU Fall Meeting
2019 – 2022	Elected member of the Science Steering Committee of the Computational Infrastructure for Geodynamics (CIG), Vice Chair in 2021, Chair in 2022
2014 – 2022	Committee Member of the Mantle Convection working group of the Computational Infrastructure for Geodynamics (CIG)
2017 – 2021	Session OSPA Liaison at the AGU Fall Meeting
2020	Member of the CIG Search/Special Committee for a new vision and leadership for CIG-IV
2016	Judge for the Outstanding Student Poster and PICO Award at the EGU General Assembly
2013-2014	Elected Student Representative of the graduate school GeoSim involving communicating the student's interests to the executive board

⌘ Organization of Workshops and Seminars

2023	Co-Organizer of the 10th <i>ASPECT Hackathon</i> in Lincoln City, USA
2022	Co-Organizer of the 9th <i>ASPECT Hackathon</i> in Cody, USA
2021	Co-Organizer of the 8th <i>ASPECT Hackathon</i> (virtual)
2020	Organization committee member of the CIG Community Workshop (virtual)
2020	Co-Organizer of the seventh <i>ASPECT Hackathon</i> (virtual)
2019	Co-Organizer of the sixth <i>ASPECT Hackathon</i> near Heber City, USA
2018	Co-Organizer of the fifth <i>ASPECT Hackathon</i> near Petaluma, USA
2017	Co-Organizer of the fourth <i>ASPECT Hackathon</i> , Blue Ridge, USA
2016	Co-Organizer of the third <i>ASPECT Hackathon</i> , Lake Tahoe, USA
10/2014	Organizer of the <i>GeoSim Fall school "Software development"</i>
2013	Organization committee member of the <i>GeoSim seminar series</i> , Potsdam, Germany
11/2012	Organization committee member of the <i>Annual workshop of the graduate school GeoSim</i>
8/2011	Management team of the <i>12th International Workshop on Modeling of Mantle Convection and Lithospheric Dynamics</i> , Potsdam, Germany