Fabio Crameri

Graphic design · Scientific communication · Geosciences · Numerical modelling

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Born in: Davos, Switzerland · *Nationality*: Swiss

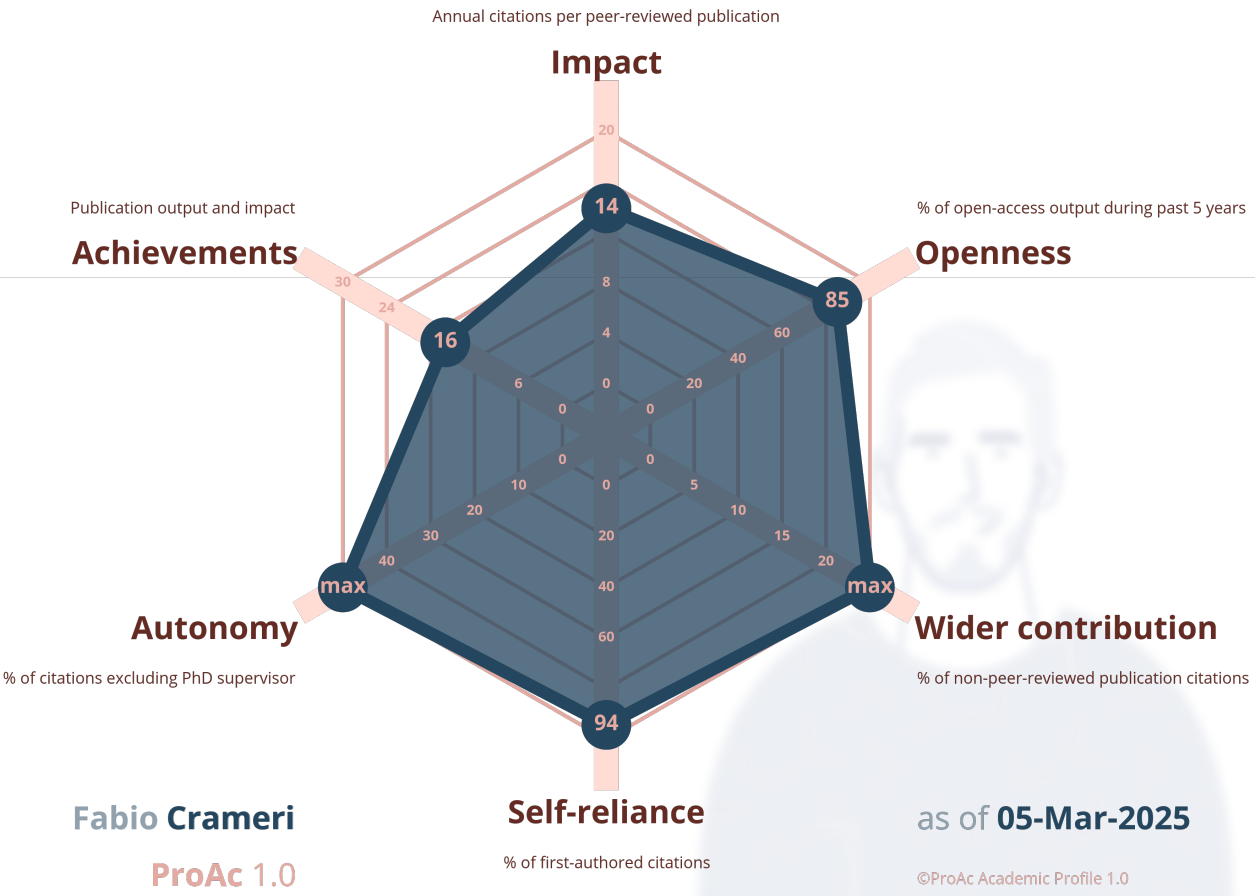
Education

2013	**PhD** in Geophysics, ETH Zürich. Disputation: *The interaction between subduction-related mantle currents and surface topography*, 19.04.2013. Dep. of Earth Sciences, ETH Zürich, Switzerland; Supervisor: Paul J. Tackley
2009	MSc in Earth Sciences, ETH Zürich
2007	BSc in Earth Sciences, ETH Zürich
2003	Federal maturity, Schweizerische Alpine Mittelschule Davos (SAMD)

Current and previous positions

01/2022–*now*	**Scientific graphic designer + free-lance researcher + owner**, Undertone.design
01/2024–*now*	**60% Scientific Communications Specialist**, International Space Science Institute (ISSI), Bern, Switzerland
03/2023 -05/2024	Communications Assistant, European Geoscience Union (EGU), Munich Germany
03/2022–05/2022	50% Social Media Communicator, European Geoscience Union (EGU), Munich Germany
03/2021–05/2021	50% Social Media Intern, European Geoscience Union (EGU), Munich Germany
01/2021–12/2021	20% Researcher, CEED, University of Oslo, Norway
03/2019–12/2020	Researcher, CEED, University of Oslo, Norway
03/2016–03/2019	Postdoctoral Research Fellow, CEED, University of Oslo, Norway
01/2014–12/2015	Research Associate, Dept. of Earth Sciences, University College London, UK

Academic profile



Institutional responsibilities

12/2023–*now* **Journal Development Team**, Geodynamica (community-led diamond open-access journal)
12/2020–03/2023 Journal Development Team, Tektonika (community-led diamond open-access journal)
01/2021–12/2022 **Guest Associate Editor**, Frontiers Solid Earth Geophysics
04/2020–12/2020 Deputy Team Leader, CEED Earth Modelling
08/2017–12/2020 Project Leader Assistant, CEED Earth Modelling high-performance computing

Supervising

11/2019–07/2020 **Supervisor**, BSc student Stefan Scherrer, Zurich University of the Arts
09/2018–09/2019 Co-supervisor, MSc student Rebecca Karlsson, CEED, University of Oslo
09/2016–now Co-supervisor, PhD student Sruthi Uppalapati, CEED, University of Oslo
09/2015–10/2019 Co-supervisor, PhD student Antoniette G. Grima, University College London
09/2015–10/2019 Co-supervisor, PhD student Kiran Chotalia, University College London
09/2014–06/2015 Co-supervisor, MSc student Kiran Chotalia, University College London

Teaching activities

11/2024 Workshop for PhD students, TU Delft, Figure design + Scientific use of colour
05/2024 Workshop for PhD students, ERDW ETH Zurich, The art of graphic design
05/2024 Masterclass for PhD students, The University Center in Svalbard, Scientific graphic design
02/2023 Masterclass for PhD students, University of Toronto, The art of science communication
09/2022 Shortcourse for PhD students, iEarth Norway, Visualising science
2016/2018–22 Shortcourse for PhD students, University of Oslo, Modelling in Geosciences / Mantle convection / Subduction / Subduction zone initiation / Scientific Visualisation / Scientific colour use
05/2020 **Scientific Teaching Certificate**, course on the principles of backwards design, issued by KURT, Uni. of Oslo
10/2014 Shortcourse for PhD students, University College London, Mantle convection

Organisation of scientific meetings and workshops

2018 **Initiator and lead organiser**, YoungCEED workshop–*When do oceanic plates start to sink?*
2018–*now* Co-initiator and lecturer: EGU short courses *Geodynamics 101* (2018–2023) & *Creative collaboration* (2023)
2017–*now* Session convener: EGU GA (2021–2024), AGU Fall Meeting (2016–2017), Nethermod WS (2017)

Web platform development & maintenance

on-going ProAc · *Online toolbox to create a free academic profile*
on-going s-ink.org · *Online collection for artistic and science-proof science graphics*
on-going SZIdatabase.org · *Online resource and sharing platform for subduction zone initiation knowledge and data*
2015 SEISMIN · *Interactive learning webpage on planetary dynamics*

Software and database development & maintenance

on-going Scientific Colour Maps · *Perceptually uniform, colour-blind friendly palettes* (doi: 10.5281/zenodo.1243862)
on-going SZI Database · *Transdisciplinary data collection for subduction zone initiation* (doi: 10.5281/zenodo.3756716)
on-going StagLab · *Geodynamic diagnostics and scientific visualisation* (doi: 10.5281/zenodo.1199037)
on-going DiVA · *Fully automated, effective figure design for MatLab* (doi: 10.5281/zenodo.3596368)

Wider contributions to the academic community

- **Peer-reviews** for NSF · NERC · Science · Nature · Nature Geoscience · Nature Communications · Communications earth & environment · GRL · JGR · G-cubed · Tectonics · AGU books · Geology · Tectonophysics · GJI · PEPI · EPSL · Frontiers · EGU Solid Earth · Earth-Science Reviews · EGU HESS · GSL · EGU Geoscience Communication · PeerJ · NeuroImage · Science Bulletin · EGU ESD
- **Visual-identity designs** for UCL Earth Sciences · BGI Geodynamics · NERC Deep Volatiles · BGI Deep Earth Volatile Cycles · UCL Exoplanet Centre · EGU Annales Geophysicae · CEED Working Groups and Initiatives · Geo-sports.org · ERN Award for Women in Geosciences · Geodynamica · ISSI Bern
- **Active support** for inclusive colour use · young-scientist development and activities · gender equality · full open-access journals and scientific software · a fair and inclusive academia

Publications

→ Citation Indices

Journal articles (pre-print)

2024 Grima, A.G., C.R. Lithgow-Bertelloni, **F. Crameri** (2024, Pre-print), The Role of the Overriding Plate and Mantle Viscosity Structure on Deep Slab Morphology, *ESS Open Archive*, https://doi.org/10.22541/essoar.170964995.57695978/v1

2022 **Crameri**, **F.** (2022, pre-print), Academic profiling, instead of ranking, with ProAc (0.1.0), *Zenodo*, https://doi.org/10.5281/zenodo.6569100

2022 **Crameri**, **F.**, G.E. Shephard, and E.O. Straume (2022, pre-print), The open collection of geoscience graphics, *EarthArXiv*, https://doi.org/10.31223/X51P78

Journal articles (peer-reviewed)

2025 Heron, P.J., **F. Crameri**, E.F. Canaletti, D. Harrison, S. Hashemi, P. Leigh, S. Narayan, K. Osowski, R. Rantanen, and J.A. Williams (2025), Art, music, and play as a teaching aid: applying creative uses of Universal Design for Learning in a prison science class. *Front. Educ.* 10:1524007. https://doi.org/10.3389/feduc.2025.1524007

2024 Yin, Y., **F. Crameri**, G.E. Shephard, and P.J. Heron (2024), Changing your perspective: the impact of different visualisation methods on seismic hazard maps. *Canadian Journal of Earth Sciences*. https://doi.org/10.1139/cjes-2023-0123

· Fuderer, M., B. Wichtmann, **F. Crameri**, N.M. deSouza, B. Baeßler, V. Gulani, M. Wang, D. Poot, R. de Boer, M. Cashmore, K. E. Keenan, D. Ma, C. Pirkl, N. Sollmann, S. Weingärtner, S. Mandija, X. Golay (2024), Color-map recommendation for MR relaxometry maps, *Magn Reson Med.*, 1-17. https://doi.org/10.1002/mrm.30290

· Sollmann, N., M. Fuderer, **F. Crameri**, S. Weingärtner, B. Baeßler, V. Gulani, K.E. Keenan, S. Mandija, X. Golay and N.M. deSouza (2024), Color Maps: Facilitating the Clinical Impact of Quantitative MRI. *J Magn Reson Imaging*. https://doi.org/10.1002/jmri.29573

· Mahecha M.D., G. Kraemer, and **F. Crameri** (2024), Cautionary remarks on the planetary boundary visualisation, *Earth System Dynamics*, 15, 1153–1159, https://doi.org/10.5194/esd-15-1153-2024

· **Crameri**, **F.**, G.E. Shephard, and P.J. Heron (2024), Choosing suitable color palettes for accessible and accurate science figures, *Current Protocols*, 4, e1126. https://doi.org/10.1002/cpz1.1126

2022 van Zelst, I., **F. Crameri**, A.E. Pusok, A.C. Glerum, J. Dannberg, C. Thieulot (2022), 101 geodynamic modelling: how to design, interpret, and communicate numerical studies of the solid Earth, *Solid Earth*,*13*, 583–637 (https://doi.org/10.5194/se-13-583-2022)

· Kaspar, F. and **F. Crameri** (2022), Coloring Chemistry–How Mindful Color Choices Improve Chemical Communication, *Angew. Chem. Int. Ed.*, 61, e202114910. (doi: 10.1002/anie.202114910)

2020 **Crameri**, **F.**, G.E. Shephard, and P.J. Heron (2020), The misuse of colour in science communication, *Nature Communications*, 11, 5444. (doi: 10.1038/s41467-020-19160-7)

· Grima, A.G., C.R. Lithgow-Bertelloni, and **F. Crameri** (2020), Orphaning Regimes: The Missing Link Between Flattened and Penetrating Slab Morphologies, *Frontiers in Earth Science*, *8(374)*, (doi: 10.3389/feart.2020.00374)

· **Crameri**, **F.**, V. Magni, M. Domeier, G.E. Shephard, K. Chotalia, G. Cooper, C. Eakin, A.G. Grima, D. Gürer, Á. Király, E. Mulyukova, K. Peters, B. Robert, and M. Thielmann (2020), A transdisciplinary and community-driven database to unravel subduction zone initiation, *Nature Communications*, 11, 3750. (doi: 10.1038/s41467-020-17522-9)

· Uppalapati, S., T. Rolf, **F. Crameri**, S.C. Werner (2020), Dynamics of lithospheric overturns and implications for Venus's surface, *Journal of Geophysical Research: Planets*, *125, e2019JE006258*, (doi: 10.1029/2019JE006258)

· Karlsson, R.V.M.K., K.W. Cheng, **F. Crameri**, T. Rolf, S. Uppalapati, S.C. Werner (2020), Implications of anomalous crustal provinces for Venus' resurfacing history, *Journal of Geophysical Research: Planets*, *125, e2019JE006340*, (doi: 10.1029/2019JE006340)

2019 **Crameri**, **F.**, G.E. Shephard and C.P. Conrad (2019), Plate Tectonics*, *Reference Module in Earth Systems and*

Environmental Sciences, Elsevier. (doi: 10.1016/B978-0-12-409548-9.12393-0)

- **Crameri**, **F.**, C.P. Conrad, L. Montési and C.R. Lithgow-Bertelloni (2019), The dynamic life of an oceanic plate, *Tectonophysics*, *760*, 107–135. (doi: 10.1016/j.tecto. 2018.03.016)

2018 **Crameri**, **F.** (2018), Geodynamic diagnostics, scientific visualisation and StagLab 3.0, *Geosci. Model Dev.*, *11(6)*, 2541–2562. (doi: 10.5194/gmd-11-2541-2018)

- **Crameri**, **F.** and C.R. Lithgow-Bertelloni (2018), Abrupt upper-plate tilting during slab–transition-zone collision, *Tectonophysics*, *746*, 199–211. (doi: 10.1016/ j.tecto.2017.09.013)

2017 **Crameri**, **F.**, C.R. Lithgow-Bertelloni, and P.J. Tackley (2017), The dynamical control of subduction parameters on surface topography, *Geochem. Geophys. Geosyst.*, *18(4)*, 1661–1687. (doi: 10.1002/2017GC006821)

2016 **Crameri**, **F.**, and P.J. Tackley (2016), Subduction initiation from a stagnant lid and global overturn: new insights from numerical models with a free surface, *Progress in Earth and Planetary Science*, *3(1)*, 1–19. (doi: 10.1186/s40645-016-0103-8)

- Cagney, N., **F. Crameri**, W. Newsome, C.R. Lithgow-Bertelloni, A. Cotel, S. Hart, and J. Whitehead (2016), Constraining the source of mantle plumes, Earth and Planetary Science Letters, *435*, 55–63. (doi: 10.1016/j.epsl.2015.12.008)

2015 **Crameri**, **F.**, and P.J. Tackley (2015), Parameters Controlling Dynamically Self-Consistent Plate Tectonics and Single-Sided Subduction in Global Models of Mantle Convection, *J. Geophys. Res. Solid Earth*, *120(5)*, 3680–3706. (doi: 10.1002/ 2014JB011664)

2014 **Crameri**, **F.**, and P.J. Tackley (2014), Spontaneous development of arcuate single-sided subduction in global 3-D mantle convection models with a free surface, *J. Geophys. Res. Solid Earth*, *119(7)*, 5921–5942. (doi: 10.1002/2014JB010939)

2012 **Crameri**, **F.**, P.J. Tackley, I. Meilick, T.V. Gerya, and B.J.P. Kaus (2012), A free plate surface and weak oceanic crust produce single-sided subduction on Earth, *Geophys. Res. Lett.*, *39(3)*, L03306. (doi: 10.1029/2011GL050046)

- **Crameri**, **F.**, H. Schmeling, G.J. Golabek, T. Duretz, R. Orendt, S.J.H. Buiter, D.A. May, B.J.P. Kaus, T.V. Gerya, and P.J. Tackley (2012), A comparison of numerical surface topography calculations in geodynamic modelling: an evaluation of the 'sticky air' method, *Geophysical Journal International*, *189(1)*, 38–54. (doi: 10.1111/j.1365-246X.2012.05388.x)

2010 **Crameri**, **F.**, and B.J.P. Kaus (2010), Parameters that control lithospheric-scale thermal localization on terrestrial planets, *Geophys. Res. Lett.*, *37(9)*, L09308. (doi: 10.1029/2010GL042921)

Others

2024 **Crameri**, **F.** and S. Hason (2024), Navigating color integrity in data visualization, *Patterns, 5(5)*, 100972, (https://doi.org/ 10.1016/j.patter.2024.100972)

2023 **Crameri**, **F.** (2023), Caring for those who care: Reflections from academics at EGU23, edited by G. D'Souza, *EGU-GeoLog Blog*. (→ Link)

· **Crameri**, **F.** (2023), Honest observations about EGU23 poster designs: from geophysicist and graphic designer Fabio Crameri, edited by G. D'Souza, *EGU-GeoLog Blog*. (→ Link)

2022 **Crameri**, **F.** (2022), EGU22: Rethinking (geo)scientific conferences today, edited by H. Gibson and G. D'Souza, *EGU-GeoLog Blog*. (→ Link)

· **Crameri**, **F.** (2022). Breaking subductions' fourth wall. *Nature Geoscience*, *15*, 95–96. https:// doi.org/10.1038/s4156 022-00894-6 (→ Open-access link)

2021 Heron, P.J., **F. Crameri** and G.E. Shephard (2021), How rainbow colour maps can distort data and be misleading, edited by Nehal El-Hadi, *The Conversation Canada*. (→ Link)

· **Crameri**, **F.** (2021). ProAc: Profiling, instead of ranking, academics. Zenodo. (doi:10.5281/zenodo.4899015)

2020 Shephard, G.E. and **F. Crameri** (2020), How many transdisciplinary researchers does it take to find out how an ocean sinks?, edited by H. Gibson, *EGU-GeoLog Blog*. (→ Link)

2018 **Crameri**, **F.** (2018), To serve Geoscientists, edited by G.E. Shephard, *EGU-Geodynamics Blog*. (→ Link)

2017 **Crameri**, **F.** (2017), Planetary Tectonics: Sinking plates on Venus, *Nature Geoscience*, *10*, 330–331. (doi:10.1038/ngeo

· **Crameri**, **F.** (2017), The Rainbow Colour Map (repeatedly) considered harmful, edited by G.E. Shephard, *EGU-Geodynamics Blog*. (→ Link)

2013 **Crameri**, **F.** (2013), The interaction between subduction-related mantle currents and surface topography, *PhD thesis*, ETH Zurich. (doi: 10.3929/ethz-a-009954311)

2012 **Crameri**, **F.** (2012), Plattentektonik realitätsnah modellieren, *Geosciences Actuel*, *2/2012*. (→ PDF → Link)

2009 **Crameri**, **F.** (2009), Parameters that control the formation of lithospheric-scale shear zones, *Master thesis*, ETH Zurich

2007 **Crameri**, **F.** (2007), Simulation of convection and magmatic resurfacing in Io, *Bachelor thesis*, ETH Zurich

Scientific presentations

Talks

2024 **Austrian Physics Society (OEPG) Meeting**, (*invited plenary talk*), Linz, 09/2024, *The theory of ~~everything~~ accurate and accessible colour use*

- **ISSI Game Changer Webinar**, (*invited*), virtual, 09/2024, *Seeing the Unseen: Accurate and Inclusive Colour Scales in Space Science*
- **EGU General Assembly Shortcourse**, Vienna, 05/2024, *Creative collaboration: working with artists to communicate science*
- **EGU General Assembly Shortcourse**, Vienna, 05/2024, *Geodynamics 101: Numerical modelling*

2023 **EGU General Assembly**, (*invited*), Vienna, 05/2023, *Sharpening our community research on the initiation of subduction zones*

- **EGU General Assembly Shortcourse**, Vienna, 05/2023, *Creative collaboration: working with artists to communicate science*
- **EGU General Assembly Shortcourse**, Vienna, 05/2023, *Geodynamics 101: Numerical modelling*
- **Workshop presentation Aalto University** (*invited*), virtual, 04/2023, *How to prevent misuse of colour in scientific visualisation.*
- **Seminar Case Western Reserve University** (*invited*), virtual, 04/2023, *How to prevent misuse of colour in scientific visualisation.*
- **EGU Webinar** (*invited*), virtual, 03/2023, *One study, four presentations: how to share your research in any conference format!*

2022 **MSKCC New York Seminar 2022** (*invited*), virtual, 10/2022, *How to prevent misuse of colour in scientific visualisation.*

- **EGU Great Debate** (*invited*), Vienna, 05/2022, *Towards an academic evaluation system that celebrates diversity of talent*
- **EGU General Assembly**, Vienna, 05/2022, *Geodynamics 101: Numerical modelling*
- **EGU Webinar** (*invited*), virtual, 03/2022, *How to visualise your research using scientific, accessible graphics*
- **NKG WGGEO Keynote** (*invited*), virtual, 03/2022, *How to prevent misuse of colour in data processing and science communication*
- **Nature Careers Webinar** (*invited*), virtual, 03/2022, *How to use art and design in science*
- **Royal Holloway Earth Sciences Seminar** (*invited*), virtual, 02/2022, *A trans-disciplinary and community-driven database to unravel subduction zone initiation.*

2021 **University of Kentucky Rast-Holbrook Seminar** (*invited*), virtual, 09/2021, *Modelstanding ocean-plate tectonics.*

- **OpenPlanetary Lunch Seminar** (*invited*), virtual, 09/2021, *How to prevent misuse of colour in science communication.*
- **University of Hawaii TGIF Seminar** (*invited*), virtual, 02/2021, *How to prevent misuse of colour in science communication.*
- **Michigan State University SeismoLab Seminar** (*invited*), virtual, 02/2021, *The advantage, availability, and application of Scientific colour maps.*
- **University of Oslo GeoHyd Seminar** (*invited*), virtual & recorded, 01/2021, *The misuse of colour in science communication.*
- **UMR Géoazur Seminar** (*invited*), virtual, 01/2021, *How to use colour in science communication.*
- **University of Cambridge Bullard Seminar** (*invited*), virtual, 01/2021, *A trans-disciplinary and community-driven database to unravel subduction zone initiation.*

2020 **Online Geophysics&Tectonics Seminar** (*invited inaugural seminar*), Online, 06/2020, *A trans-disciplinary and community-driven database to unravel subduction zone initiation.*

- **ETH Zurich GFD Seminar** (*invited*), virtual, 05/2020, *A trans-disciplinary and community-driven database to unravel subduction zone initiation.*

2019 **Ada Lovelace Workshop** (*invited keynote; not presented*), Siena, 08/2019, *Modelstanding ocean-plate tectonics.*

- **EGU General Assembly**, Vienna, 04/2019, *Subduction Zone Initiation Database 1.0.*
- **EGU General Assembly**, Vienna, 04/2019, *Geodynamics 101b: Large-scale geodynamic processes.*

2018 **EGU General Assembly**, Vienna, 04/2018, *Abrupt and continental-wide upper-plate tilting induced by slab–transition-zone collision.*

- **EGU General Assembly**, Vienna, 04/2018, *Geodynamics 101: How to use and interpret numerical models of the solid Earth.*

2017 **AGU Meeting**, New Orleans, 12/2017, *Abrupt upper-plate tilting upon slab–transition-zone collision.*

- **BGI Seminar** (*invited*), University of Bayreuth, 06/2017, *The interplay between subducting plates, surface topography, and ...rainbows.*
- **EGU General Assembly**, Vienna, 04/2017, *The dominant surface-topography contributions of individual subduction parameters.*

2015 **University of Oslo CEED Seminar** (*invited*), Oslo, 10/2015, *The interaction between mantle currents and surface topography.*

2014 **Lyell Geoscience Society Lecture** (*invited*), Royal Holloway University, London, 10/2014, *Numerical modelling of global mantle convection and subduction: Challenges and recent advances.*

- **Cardiff University Seminar** (*invited*), Cardiff, 05/2014, *Single-sided subduction and related mantle currents in global numerical models of mantle convection.*

2013 **Imperial College Subduction Seminar** (*invited*), London, 12/2013, *The interaction between subduction-related mantle currents and surface topography.*

- **Scripps Institution of Oceanography Seminar** (*invited*), San Diego, 07/2013, *The interaction between subduction-related mantle currents and surface topography.*

2012 **EGU General Assembly**, Vienna, 04/2012, *A free plate surface and weak oceanic crust produce single-sided subduction on Earth.*

2011 **Swiss Geoscience Meeting**, Zurich, 11/2011, *Single-sided subduction on Earth.*

- **Topo-Europe Meeting**, Davos, 10/2011, *A free plate surface and weak oceanic crust produce single-sided subduction on Earth.*
- **EGU General Assembly**, Vienna, 04/2011, *Single-sided subduction on Earth.*

2010 **Topo-Europe Meeting**, Oslo, 11/2010, *One-sided subduction in self-consistent models of global mantle convection: the importance of a free surface and a weak crustal layer.*

2009 **Swiss Geoscience Meeting**, Neuchatel, 11/2009, *Parameters that control the formation of lithospheric-scale shear zones.*

2007 **Swiss Geoscience Meeting**, Geneva, 10/2007, *Simulation of convection and magmatic resurfacing in Io.*

Posters, PICOs & Displays

2024 **EGU General Assembly**, Vienna, 05/2024, *Towards a fair and inclusive next-generation of academic evaluation*

2023 **EGU General Assembly**, Vienna, 05/2023, *Profiling, instead of ranking, academics with the multi-metric academic profile ProAc*

2022 **CEED Seminar**, Sundvollen, 11/2022, *Independent CEED initiatives and how they have contributed to pave the way for another decade of successful geosciences*

2021 **#vEGU21 General Assembly**, online, 04/2021, *The 'Scientific colour map' Initiative: Version 7 and its new additions.*

2020 **shareEGU General Assembly**, online, 05/2020, *Towards ready-to-use open source automated geodynamic diagnostics and fair representation of numerical models.*

· **shareEGU General Assembly**, online, 05/2020, *How to appreciate, use, and choose Scientific Colour Maps.*

2019 **APECS Svalbard Workshop**, Oslo, 11/2019, *Nuuk, an arctic scientific colour map.*

· **Arctic Day**, Oslo, 10/2019, *Nuuk, an arctic scientific colour map.*

· **Ada Lovelace Workshop**, Siena, 08/2019, *Subduction zone initiation (SZI) database 1.0: Ready, set, model!*

· **EGU General Assembly**, Vienna, 04/2019, *Scientific Colour Maps: Reducing error across the Geodynamics community.*

2018 **Plate Tectonics Workshop**, London, 03/2018, *"Ocean-Plate Tectonics": The importance of the mantle framework.*

2017 **Nethermod Workshop**, Putten, 08/2017, *Abrupt Upper-Plate Tilting During Slab–Transition-Zone Collision.*

· **Nethermod Workshop**, Putten, 08/2017, *StagLab: Post-processing and Visualising Mantle and Lithosphere Dynamics.*

· **EGU General Assembly**, Vienna, 04/2017, *StagLab: Post-processing and Visualisation in Geodynamics.*

2016 **Plate Tectonics Workshop**, Ascona, 07/2016, *Subduction initiation from a stagnant lid and global overturn: new insights from numerical models with a free surface.*

2016 **EGU General Assembly**, Vienna, 04/2016, *Subduction initiation from a stagnant lid: New insights from numerical models with a free surface.*

2015 **AGU Meeting**, San Francisco, 12/2015, *Towards dynamically constraining subduction zone parameters from surface-topography characteristics.*

· **IWMMLD**, Olérons, 09/2015, *Towards dynamically constraining subduction zone parameters from surface-topography characteristics.*

2014 **AGU Meeting**, San Francisco, 12/2014, *Physical Parameters Controlling Subduction Dynamics and Surface Topography in Self-consistent Global Models of Mantle Convection.*

· **AGU Meeting**, San Francisco, 12/2014, *Subduction Initiation in a Stagnant Lid and Episodic Overturn on Venus.*

2014 **EGU General Assembly**, Vienna, 04/2014, *Spontaneous development of arcuate single-sided subduction in global 3-D mantle convection models with a free surface.*

· **EGU General Assembly**, Vienna, 04/2014, *Sinking of spherical slablets through a non-Newtonian mantle.*

2013 **IWMMLD**, Oslo, 09/2013, *Spontaneous trench migration and mantle flow in self-consistent mantle dynamics.*

2012 **AGU Meeting**, San Francisco, 12/2012, *Dynamical implications of single-sided subduction and floating continents in global self-consistent models of mantle convection.*

· **GeoMod**, Lausanne, 07/2012, *Implications of single-sided subduction in global self-consistent models of mantle convection.*

· **EGU General Assembly**, Vienna, 04/2012, *Slab-mantle interactions in simulations of self-consistent mantle convection with single-sided subduction.*

2011 **AGU Meeting**, San Francisco, 12/2011, *A benchmark comparison of numerical topography: what are suitable sticky-air parameters?*

· **IWMMLD**, Berlin, 08/2011, *A free plate surface and weak oceanic crust produce single-sided subduction on Earth.*

· **EGU General Assembly**, Vienna, 04/2011, *One-sided subduction in self-consistent models of global mantle convection: the importance of a free surface and a weak crustal layer.*

2010 **Swiss Geoscience Meeting**, Fribourg, 11/2010, *One-sided subduction in self-consistent models of global mantle convection: the importance of a free surface and a weak crustal layer.*

· **GeoMod**, Lisbon, 10/2010, *One-sided subduction in self-consistent models of global mantle convection: the importance of a free surface and a weak crustal layer.*

· **EGU General Assembly**, Vienna, 05/2010, *One-sided subduction in self-consistent models of global mantle*

convection: the importance of a free surface and a weak crustal layer.

2009 **Swiss Geoscience Meeting**, Neuchatel, 11/2009, *One-sided subduction in self-consistent models of global mantle convection: the importance of a free surface and a weak crustal layer.*

· **Crystal2Plate workshop**, Montpellier, 10/2009, *One-sided subduction in self-consistent models of global mantle convection: the importance of a free surface and a weak crustal layer.*

Public outreach

Selected scientific front-cover artwork

2023 **GeoExPro**, 2023, Henk Kombrink (editor), *5/2023*, *vol.20.*, GXP Publishing AS (→ Link)

2015 **Treatise of Geophysics**, 2015, G. Schubert (editor), *2nd ed.*, *5604 pp.*, Elsevier Science Ltd. (→ Link)

2014 **Geodynamics**, 2013, Turcotte, D., and G. Schubert, *3rd ed.*, *636 pp.*, Cambridge University Press, New York. (→ Link)

2013 **bild der wissenschaft**, 10/13, 90'000 copies. (→ Link).

Other selected scientific artwork

2018 **Jerram, D.** (2018), The Centre of the Earth: The Traveller's Guide (Traveller's Guides), *Palazzo Editions*, *ISBN13: 978-1-78675-059-4*, 160 p. (www.palazzoeditions.com/ travellers-guide-centre-earth)

2016 **Voosen, P.** (2016), 'Atlas of the Underworld' reveals oceans and mountains lost to Earth's history, *Science News*. (doi: 10.1126/science.aal0411)

2013 **Kerr, R.A.** (2013), The Deep Earth Machine Is Coming Together, *Science*, *340(6128)*, 22–24. (doi: 10.1126/science.340.6128.22)

Other public outreach

2023 **Radiology interview**, 04/2023, Interview for Miske (2023), *Radiology*, (→ Link)

2021 **Nature interview**, 10/2021, Interview for Katsnelson (2021), *Nature*, 598, 224-225 (→ doi.org/ 10.1038/d41586-021-02696-z)

· **Titan.uio.no interview**, 01/2021, Interview about how the improper use of colour can distort scientific data (→ Link)

2020 **Co.Scienza Podcast**, 12/2020, Audio interview about Scientific colour maps: I Colori della Scienza (Quarantatreesima Puntata) (→ Link)

2019 **University Museum Bergen**, 10/2019, Motion graphics of a mantle convection model for a 5-m wide projection (→ Link)

· **AGU EOS**, 09/2019, Interview for AGU EOS about Ocean-Plate Tectonics (→ Link)

· **National Geographic Interview**, 05/2019, Interview for National Geographic about subduction zone initiation (→ Link)

· **YouTube Interview**, 02/2019, Interview for A Slice of CEED about colour maps (→ Link)

2016 **Scientific Visuals for Classical Concert**, 11/2016, "PhiloGaia2016: Trip to the heart of the Earth" (comp. B. Brice, PhiloGaïa Orchestra IPGP) (→ Link)

2015 **Online Resource for Schools**, 10/2015, SEISMIN: Interactive learning homepage on planetary dynamics (→ Link)

2012 **YouTube Interview**, 03/2012, Interview for CSCS about modelling of plate tectonics and single-sided subduction (→ Link)

· **Swiss National Television broadcast "Einstein"**, 03/2012, Documentation and interview about our work on plate tectonics (→ Link)

· **ETH Globe**, 02/2012, Article about simulations in general and our simulations of plate tectonics (→ PDF → Link)

· **ETH life**, 02/2012, Article about our modelling of plate tectonics and single-sided subduction (→ PDF → Link)