Dr. Johannes Feldmann

Curriculum Vitae

Scientific career

Since 2016 **Postdoctoral researcher** in group of JProf. Dr. Ricarda Winkelmann, *Potsdam Institute for Climate Impact Research*, Germany.

2013 – 2016 **Ph.D. (Dr. rer. nat.) in Climate Physics (summa cum laude)**, *Potsdam Institute for Climate Impact Research*, Germany and *University of Potsdam*, Germany.

Doctoral thesis on: *"Stability of the West Antarctic Ice Sheet: From the concept of similitude to dynamic modeling"*

Supervisor: Prof. Dr. Anders Levermann

06/2012 – 11/2012 **Visiting scientist**, *University of Alaska Fairbanks*, USA.

2006 – 2012 **Studies in Physics**, *University of Potsdam*, Germany.

Graduation in Physics (Diplom) "with distinction"

Diploma thesis on: *"Modeling of Pine Island and Thwaites Glaciers with PISM-PIK"*

Majors: Climate Physics, Computational Physics

Awards

Ph.D. scholarship awarded by Deutsche Bundesstiftung Umwelt (2013 – 2016)

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Peer-reviewed publications

J. Feldmann and A. Levermann. *Stabilizing the West Antarctic Ice Sheet by surface mass deposition.* Science Advances 5 (2019), doi:10.1126/sciadv.aaw4132

A. Levermann and **J. Feldmann**. *Scaling of instability time-scales of Antarctic outlet glaciers based on one-dimensional similitude analysis.* The Cryosphere 13 (2019), 1621-1633, doi:10.5194/tc-2018-252

J. Feldmann, R. Reese, R. Winkelmann and A. Levermann. *Snowfall versus sub-shelf melt: response of an idealized 3D ice-sheet-shelf system to mass redistribution.* The Cryosphere Discussions (2018), doi:10.5194/tc-2018-109

J. Feldmann and A. Levermann. *From cyclic ice streaming to Heinrich-like events: the grow-and-surge instability in the Parallel Ice Sheet Model* The Cryosphere 11 (2017), 1913-1932, doi:10.5194/tc-11-1913-2017

J. Feldmann and A. Levermann. *Similitude of ice dynamics against scaling of geometry and physical parameters.* The Cryosphere 10 (2016), 1753-1769, doi:10.5194/tc-10-1753-2016

M. Mengel, **J. Feldmann** and A. Levermann. *Linear sea-level response to abrupt ocean warming of major West Antarctic ice basin.* Nature Climate Change 6 (2016), 71-74, doi:10.1038/nclimate2808

J. Feldmann and A. Levermann. *Collapse of the West Antarctic Ice Sheet after local destabilization of the Amundsen Basin.* Proceedings of the National Academy of Sciences 112 (2015), doi:10.1073/pnas.1512482112

J. Feldmann and A. Levermann. *Interaction of marine ice-sheet instabilities in two drainage basins: simple scaling of geometry and transition time.* The Cryosphere 9 (2015), 631-645, doi:10.5194/tc-9-631-2015

J. Feldmann, T. Albrecht, C. Khroulev, F. Pattyn and A. Levermann. *Resolution-dependent performance of grounding line motion in a shallow model compared to a full-Stokes model according to the MISMIP3d intercomparison.* Journal of Glaciology 60(220) (2014), 353-360. doi:10.3189/2014JoG13J093

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