

CURRICULUM VITAE: MATTHIAS MORZFELD

Institute of Geophysics and Planetary Physics
Scripps Institution of Oceanography
University of California, San Diego

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EDUCATION

University of California, Berkeley	Mechanical Engineering	Ph.D.	2011
University of California, Berkeley	Mechanical Engineering	M.Sc.	2009
Technical University Darmstadt (Germany)	Mechanical Engineering	Diplom	2007

POSITIONS

<i>Associate Professor</i>	Scripps Institution of Oceanography, UC San Diego	2019–present
<i>Assistant Professor</i>	Department of Mathematics, University of Arizona	2015–2019
<i>Visiting Professor</i>	Institute de Physique du Globe de Paris (France)	2013, 2014, 2016
<i>Postdoctoral Fellow</i>	Department of Mathematics, University of California, Berkeley	2012–2015
<i>Postdoctoral Fellow</i>	Mathematics Group, Lawrence Berkeley National Laboratory	2011–2012

AWARDS

SIO Undergraduate Teaching Award (2024)
Alfred P. Sloan Research Fellowship (2016)

EDITORIAL BOARDS & PROFESSIONAL SOCIETIES

Associate Editor, SIAM/ASA Journal on Uncertainty Quantification	since 2023
Associate Editor, Monthly Weather Review	2018–2023
American Geophysical Union (Life member)	since 2010

TEACHING

Scripps Institution of Oceanography, University of California, San Diego

SIOG 223a – Geophysical data analysis (every fall)
SIOG 235 – Computational Inverse Problems (every other winter)
SIO 112 – Computational Tools and Data Science in Geophysics (every other spring)
SIO 87 – Physics of Surfing (every year)

Department of Mathematics, University of Arizona

Data assimilation and inverse problems I & II, Math 310 (Applied Linear Algebra), Math 313 (Linear Algebra),
Math 125 (Calculus 1), Math 129 (Calculus 2).

Department of Mathematics, UC Berkeley

Math 128b: Numerical Analysis

GRADUATE ADVISING

[Rebecca Gjini](#), [Kyle Ivey](#) (co-advised with Steve Constable), [Eliana Vargas Huitzil](#) (co-advised with Steve Constable).

FORMER GRADUATE STUDENTS

Kyle Gwartz, Scripps Institution of Oceanography, University of California, San Diego.

Topic: Numerics of data assimilation for decadal scale geomagnetic forecasting.
Job after graduation: NASA Postdoctoral Fellowship.

Jordan Pillow, Program in Applied Mathematics, University of Arizona.

Topic: MCMC for quantitative image analysis in the security sciences.
Job after graduation: Postdoc at NNSA.

Travis Harty, Program in Applied Mathematics, University of Arizona.

Topic: Intra-hour cloud index forecasting.

Job after graduation: Scientist at Worldview.

Spencer Lunderman, Mathematics, University of Arizona.

Topic: Feature-based data assimilation and global Bayesian optimization.

Job after graduation: Finance (declined JPL postdoc).

Jesse Adams, Program in Applied Mathematics, University of Arizona.

Topic: MCMC for quantitative image analysis in the security sciences.

Job after graduation: Staff scientist at the Nevada National Security Site.

Andrew Leach, Program in Applied Mathematics, University of Arizona, 2017.

Topic: Monte Carlo methods for stochastic differential equations (co-advised with Kevin K. Lin).

Job after graduation: Machine learning engineer at Google.

Antonio Lorenzo, College of Optical Science, University of Arizona, 2017.

Topic: Irradiance forecasting (co-advised with Alexander D. Cronin).

Job after graduation: Research scientist at the University of Arizona.

FORMER POSTDOCS

William Davis, Scripps Institution of Oceanography, University of California, San Diego.

Next job: AI/ML Engineer at Terra AI.

Dani Blatter, Scripps Institution of Oceanography, University of California, San Diego.

Next job: Postdoc at Lawrence Berkeley National Laboratory, then faculty at Las Positas College.