

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, 2024 – present
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.