Stanford

Jenny Suckale

Assistant Professor of Geophysics

Curriculum Vitae available Online

Bio

BIO

Before joining Stanford in January 2014, I held a position as Lecturer in Applied Mathematics and as a Ziff Environmental Fellow at Harvard. I hold a PhD in Geophysics from MIT and a Master in Public Administration from the Harvard Kennedy School. Prior to joining graduate school, I worked as a scientific consultant for different international organizations aiming to reduce the impact of natural and environmental disasters in vulnerable communities. The goal of my research is to advance our basic understanding and predictive capabilities of complex multi-phase flows that are fundamental to Earth science. I pursue this goal by developing original computational methods customized for the problem at hand. The phenomena I explore range from the microscopic to the planetary scale and space a wide variety of geophysics systems such as volcanoes, glaciers, and magma oceans. I have taught both undergraduate and graduate courses in scientific, planetary evolution, and natural disasters. Since arriving at Stanford in January 2014, I have co-taught GES 118, Understanding Natural Hazards, Quantifying Risk, Increasing Resilience in Highly Urbanized Regions

ACADEMIC APPOINTMENTS

- Assistant Professor, Geophysics

ADMINISTRATIVE APPOINTMENTS

- Research Fellow, Seismic Hazards, GeoForschungsZentrum (GFZ), Potsdam, Germany, (2003-2004)
- Research Fellow, Seismic Hazards, Institute de Recherche pour le Developpement (IRD), Nice, France, (2003-2003)

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HONORS AND AWARDS

- Miller Research Fellowship (declined), University of California, Berkeley (2010)
- Ziff Environmental Fellow, Harvard Center for the Environment (2010)

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PROGRAM AFFILIATIONS

- Institute for Computational and Mathematical Engineering (ICME)

PROFESSIONAL EDUCATION

- Ph.D, Massachusetts Institute of Technology , Geophysics (2011)
- MPA, Harvard University, Kennedy School of Government , Master of Public Administration (2006)

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LINKS

- Research Group, SIGMA: https://pangea.stanford.edu/researchgroups/sigma/

Research & Scholarship

PROJECTS

- Contributing towards reducing tsunami risk in Indonesia - Stanford University, SIGMA group

Teaching

COURSES

2018-19

- GEOPHYSICAL MULTI-PHASE FLOWS: GEOPHYS 385W (Aut, Win, Spr, Sum)
- Sustainable Urban Systems Project: CEE 124Y (Win)
- Sustainable Urban Systems Project: CEE 124Z (Spr)

2017-18

- Disasters, Decisions, Development in Sustainable Urban Systems: ESS 118, ESS 218, GEOPHYS 118X, GEOPHYS 218X, GS 118, GS 218, POLISCI 224A, PUBLPOL 118 (Aut)

2016-17

- GEOPHYSICAL MULTI-PHASE FLOWS: GEOPHYS 385W (Aut, Win)

2015-16

- D^3: Disasters, Decisions, Developmen: ESS 118, ESS 218, GEOPHYS 118, GEOPHYS 218, GS 118, GS 218 (Win)

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STANFORD ADVISEES

Doctoral Dissertation Reader (AC)

Leighton Watson, Molly Witter

Postdoctoral Faculty Sponsor

Tobias Keller, Ludovic Raess, Katherine Serafin

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Publications

PUBLICATIONS

- **Bistability of buoyancy-driven exchange flows in vertical tubes** *JOURNAL OF FLUID MECHANICS*
  Suckale, J., Qin, Z., Picchi, D., Keller, T., Battiato, I.
  2018; 850: 525–50
- **Adding a community partner to service learning may elevate learning but not necessarily service** *INTERNATIONAL JOURNAL OF DISASTER RISK REDUCTION*
  Suckale, J., Saiyed, Z., Hilley, G., Alvisyahrin, T., Muhari, A., Zoback, M., Truebe, S.
  2018; 28: 80–87

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