# Bradley Paul Lipovsky

Department of Earth and Planetary Science Harvard University Cambridge, MA 02138 (617) 496 5132 brad lipovsky@fas.harvard.edu

#### **EDUCATION**

2016-	Postdoctoral Fellow, Department of Earth and Planetary Sciences,
	Harvard University
2011-2016	PhD Candidate, Department of Geophysics, Stanford University,
2009-2011	Master of Science, Department of Earth Science, University of
	California–Riverside
2004-2008	Bachelor of Arts, Department of Mathematics, Cornell University
2000-2004	Associate of Arts, Mathematics, Lake Tahoe Community College

### RESEARCH EXPERIENCE

2011-2015	Research Assistant
	Department of Geophysics, Stanford University
2009-2011	Graduate Student Researcher
	Department of Earth Sciences, University of California–Riverside
2008-2009	Junior Specialist
	Department of Earth Sciences, University of California–Riverside
2008	Structural Geology Field Assistant
	Department of Earth and Atmospheric Sciences, Cornell University
2007	Forest Ecology Field Assistant
	School of Natural Resources, University of Alaska, Fairbanks

### **PUBLICATIONS**

- 1. **Lipovsky, B.P.**, and Dunham, E. M. (2017), "Slow-slip events on the Whillans Ice Plain, Antarctica, described using rate-and-state friction as an ice stream sliding law". J. Geophys. Res. http://dx.doi.org/10.1002/2016JF004183
- 2. C. R. Meyer, **Lipovsky**, **B.P.**, and Siegfried, M. R. (2016), "Inferring subglacial lake water pressure from a bending model of surface displacement observations". Abstract 145586 to be presented at 2016 AGU Fall Meeting, San Francisco, CA.
- 3. Mordret, A., Mikesel, D., Harig, C., **Lipovsky, B. P.**, Prieto, G. A. (2016) "Monitoring southwest Greenland's ice sheet melt with ambient seismic noise". Science Advances. http://dx.doi.org/10.1126/sciadv.1501538
- 4. **Lipovsky**, **B.P.**, and Dunham, E.R. (2016), "Tremor during ice stream stick-slip". The Cryosphere. http://dx.doi.org/10.5194/tc-10-385-2016

- 5. **Lipovsky, B.P.**, and Dunham, E.R. (2015), "Vibrational modes of hydraulic fractures: Inference of fracture geometry from resonant frequencies and attenuation". J. Geophys. Res. http://dx.doi.org/10.1002/2014JB011286
- 6. Gonzalez A., Gonzalez-Garcia J.J., Sandwell, D.T., Fialko, Y., Agnew, D.C., **Lipovsky**, **B.P.**, Fletcher, J.M., Nava-Pichardo, F.A. (2014) GPS coseismic and postseismic surface displacements of the El Mayor-Cucapah earthquake. J. Geophys. Res. http://dx.doi.org/10.1002/2013JB010193

## FIELD WORK

2015	"High resolution heterogeneity at the Base of Whillians Ice Stream and
	its Control on Ice Dynamics", Whillans Ice Stream, West Antarctica
2012	"Observation of icefall seismicity", Juneau Ice Field, Alaska
2010-11	Rapid postseismic deployment following the 2010 April 04 El Mayor-
	Cucapah earthquake, Mexicali, Mexico.

## HONORS, FELLOWSHIPS, AND AWARDS

2016-	Department Postdoctoral Fellowship, Department of Earth and Plane-
	tary Sciences, Harvard University
2014-15	Mannon Family Fellowship, Department of Geophysics, Stanford University
2011-12	Mannon Family Fellowship, Department of Geophysics, Stanford Uni-
2010	versity AGU Outstanding Student Paper Award

## **TEACHING**

2016	Guest Lecturer, Stanford Geophysics 120/220, "Ice, Water, Fire"
2015	Teaching Assistant, Stanford Geophysics 120/220, "Ice, Water, Fire"
2014	Guest Lecturer, Stanford Geophysics 120/220, "Ice, Water, Fire"
2013	Teaching Assistant, Stanford Geophysics 120/220, "Ice, Water, Fire"

Ice, Water, Fire is an introductory graduate/undergraduate course that explores the application of continuum mechanics to problems in glaciology, oceanography, and volcanology. Over four years of involvement, I have presented lectures on every major course topic.

## **ADVISING**

2017	Vladislav Sevostianov, Undergraduate student, Harvard University.
	Laboratory experiments on the frictional properties of ice.
2016	Evelyn Powell, Graduate student, Harvard University. Research fo-
	cusing on David Glacier seismicity.
2015	Janine Birnbaum, Undergraduate summer internship, Stanford Uni-
	versity. Research focusing on finite element modeling of ice stream load-
	ing.
2014	Dilia Olivo, Undergraduate summer internship, Stanford University.
	Research focusing on rapidly repeating stick slip motion in glaciers.

## **GRANTS AND FUNDING**

2015	National Science Foundation, Division of Polar Programs Award
	#1542885. "Collaborative Research: Characterizing Brittle Failure and
	Fracture Propagation in Fast Ice Sliding with Dynamic Rupture Models
	based on Whillans Ice Stream Seismic/Geodetic Data," Award amount
	\$210,000
2012	McGee Grant, Stanford School of Earth Sciences, "Field observation of
	icefall seismicity, Juneau Ice Field, Alaska," Award amount \$5,000
2011	National Geographic Explorers Grant, "Glacial mass loading and the
	occurrence of solid-earth seismicity: can the variation of glacial weight
	turn seismicity on and off?" Award amount \$5,000

# SERVICE

2016	Participant, United States Ice Drilling Program, Science Advisory Board
	Meeting
2015	Student Member, Cryosphere Faculty Search Committee, Department
	Geophysics, Stanford
2012-present	Reviewer for Geophysical Research Letters, Journal of Geophysical Research
2014	Student presentation judge, Stanford School of Earth Science Research
	Review
2013-2014	President, Stanford Outdoors Education
2013	Convener and chair, "Seismicity in the cryosphere", session at the Annual
	Meeting of the American Geophysical Union
2012-2013	President, Stanford Alpine Club
2011-2012	Member, Graduate Student Advisory Council, Department of Geo-
	physics
2010-2012	Student Representative, American Geophysical Union, Geodesy Section
2009-2010	University of California-Riverside Earth Science Graduate Association,
	President

## **INVITED PRESENTATIONS**

2017	Brown University Department of Earth, Environmental and Planetary
	Sciences, Department Colloquium
2017	Lamont Doherty Earth Observatory, Seismology Seminar
2016	Massachusetts Institute of Technology, Friday Informal Seminar Hour
	(FISH)
2016	University of Kansas
2016	University of Washington, Glaciology Lunch
2015	University of California, Santa Cruz
2015	Massachusetts Institute of Technology, Friday Informal Seminar Hour
	(FISH)
2014	American Geophysical Union Fall Meeting
2014	Scripps Institution of Oceanography, Institute of Geophysics and Plan-
	etary Physics, University of California–San Diego
2014	California Institute of Technology
2014	Université Joseph Fourier, Grenoble, France
2013	Earthquake Research Institute, University of Tokyo, Japan
2010	Southern California Earthquake Center Annual Meeting: Workshop on
	Transient Anomalous Strain Detection
2010	USGS Public Lecture Series Symposium at Pasadena City College
2009	Southern California Earthquake Center Annual Meeting: Workshop on
	Transient Anomalous Strain Detection

## **REFERENCES**

Eric Dunham, Stanford University, edunham@stanford.edu, (650) 725-6989 Greg Beroza, Stanford University, beroza@stanford.edu, (650) 723-4958 Paul Segall, Stanford University, segall@stanford.edu, (650) 725-7241 Slawek Tulaczyk, University of California—Santa Cruz, stulaczy@ucsc.edu, (831) 459-5207