



GABRIEL L. EGGERS

gleggers@princeton.edu || www.princeton.edu/~gleggers/

- LIFE WORK** 1990 – present Born in Jackson, Missouri, U.S.A. Currently residing in New Jersey.
2013 – present *Research Specialist I*, Geosciences Department, Princeton University.
2012 *Summer Research Intern*, Geosciences Department, Princeton University.
- EDUCATION** 2009 – 2013 Princeton University, Princeton, NJ.
Artium Baccalaureus in Geosciences, *magna cum laude*.
Planets and Life Certificate
Senior thesis: *A Regionalized Maximum-Likelihood Estimation of the Spatial Structure of Venusian Topography*.
Advisor: Prof. Frederik J. Simons.
2006 – 2009 Jackson High School, Jackson, Missouri.
Valedictorian.
- AWARDS** 2013 Chairman's Award, Department of Geosciences, Princeton University.
- RESEARCH** I am interested in the field of planetary science for its intrinsic appeal and for what it reveals about Earth. Planetary evolution is not well understood, but it can be clarified by discovering the character of other planets in our Solar System, thereby placing the Earth in a greater context. In my current position as a Research Specialist at Princeton, I am developing a quantitative approach to classifying Venusian terrains from Magellan topography. In ongoing work, I am taking this topography model and performing inversions for the joint spectral variance of topography and Magellan gravity anomaly data, in which the initial loading by topography retains the Matérn form but the final topography and gravity are the result of flexural composition. By doing this, I hope to learn about the Venusian lithosphere and elucidate causes behind the divergent evolution of Earth and her sister planet. Beyond Venus, I also maintain interests in small Solar System bodies, specifically asteroids, the application of traditional geological techniques to terrestrial bodies, and comparative planetary science, particularly in terms of planetary evolution.
- MEMBERSHIP** Member, American Geophysical Union (AGU), since 2012.
- EXTRACURRICULAR** Trash percussionist, Princeton University Band.
A.H. Osborn Senior Award for Loyalty and Service (2012)

- ABSTRACTS** **G.L. Eggers**, K.W. Lewis, F.J. Simons, and S.C. Olhede
Terrain classification on Venus from maximum-likelihood inversion of parameterized models of topography, gravity, and their relation.
46th AGU Fall Meeting, Abstract #P23E-1830, 2013.
- K.W. Lewis, F.J. Simons, and **G.L. Eggers**
Maximum-likelihood estimation of lithospheric thickness on Venus.
44th Lunar and Planetary Science Conference, Abstract #2612, 2013.
- G.L. Eggers**, K.W. Lewis, and F.J. Simons
Estimating effective elastic thickness on Venus from gravity and topography: Robust results from multi-taper and maximum likelihood analysis.
45th AGU Fall Meeting, Abstract #P23C-1948, 2012.

- REFERENCES** **Professor Frederik J. Simons** (fjsimons@princeton.edu)
Department of Geosciences
Princeton University
321b Guyot Hall
Princeton, NJ 08544
Tel: 1-609-258-2598
- Associate Research Scholar Kevin Lewis** (kwlewis@princeton.edu)
Department of Geosciences
Princeton University
308A Guyot Hall
Princeton, NJ 08544
Tel: 1-609-258-0498
- Professor Blair Schoene** (bschoene@princeton.edu)
Department of Geosciences
Princeton University
219 Guyot Hall
Princeton, NJ 08544
Tel: 1-609-258-2598