

## Outstanding Student Paper Awards

The following members received Outstanding Student Paper Awards at the 2008 AGU Fall Meeting in San Francisco, Calif. Awards for other sections and focus groups will be announced in a subsequent issue of Eos. See also Eos, 90(18), 159, 2009.

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### Earth and Space Science Informatics (IN)

**Leila Gonzales**, University of Wisconsin-Madison, *A modern plant-climate research dataset for modelling eastern North American plant taxa.*

**Jue Yang**, University of North Texas, Denton, *An environmental monitoring system with integrated wired and wireless sensors.*

### Mineral and Rock Physics (MRP)

**Fiorenza Deon**, GeoForschungsZentrum, Potsdam, Germany, *Water incorporation in wadsleyite and its influence on the olivine-wadsleyite phase boundary.*

**Melodie E. French**, University of Wisconsin-Madison, *Experimental study of the roles of mechanical and hydrologic properties in the initiation of natural hydraulic fractures.*

**Kazufusa Ishibashi**, Tokyo Institute of Technology, Tokyo, Japan, *Melting of Fe-Ni alloy at high pressure and temperature.*

**Hauke Marquardt**, GeoForschungsZentrum, Potsdam, Germany, *Elastic shear anisotropy of ferropericlase in Earth's lower mantle: Implications for the D" layer.*

**Nicholas A. Moskovitz**, University of Hawai'i at Manoa, Honolulu, *The effect of water on the thermal evolution of meteorite parent bodies.*

**Kazuhiko Otsuka**, Yale University, New Haven, Conn., *Tetrahedral occupancy of ferric iron in (Mg,Fe)O at high pressures.*

**Anne Pommier**, Institut des Sciences de la Terre d'Orléans, Centre National de la Recherche Scientifique, Université d'Orléans-Université François Rabelais de Tours, France, *Modeling the time-dependent changes in electrical conductivity of basaltic melts with redox state.*

**Aaron S. Wolf**, California Institute of Technology, Pasadena, *Thermodynamic phase relations in the MgO-FeO-SiO<sub>2</sub> system in the lower mantle.*

### Nonlinear Geophysics (NG)

**Sabine Lennartz**, Institut für Theoretische Physik, Universität Giessen, Giessen, Germany, *On the detection of long-term memory in short records.*

**Albert Osso**, Universitat Autònoma de Barcelona, Sabadell, Spain, *Climatic variability of hurricane-size statistics.*

### Near-Surface Geophysics (NS)

**Elliot Grunewald**, Stanford University, Stanford, Calif., *Estimating pore properties from NMR relaxation time measurements in heterogeneous media.*

**Vanessa Mitchell**, Stanford University, Stanford, Calif., *Rational experimental design for electrical resistivity imaging.*

### Ocean Sciences (OS)

**Katherine L. Brodie**, Virginia Institute of Marine Science, Gloucester Point, *Storm observations of persistent three-dimensional shoreline morphology and bathymetry along a geologically influenced shoreface using X-band radar (BASIR).*

**Josh Chan**, Stanford University, and Department of Plant Biology, Carnegie Institution, Stanford, Calif., *The effects of nutrient and trace metal enrichment on coastal and oceanic strains of *Synechococcus*.*

**Nai-Chen Chen**, National Taiwan University, Taipei, Taiwan, *The carbon isotopes of DIC and methane gas from gas hydrate potential area offshore SW Taiwan.*

**Annaliese Hettinger**, Bodega Marine Laboratory, University of California, Davis, Bodega Bay, *Ocean acidification affects larval and juvenile growth in the Olympia oyster *Ostrea conchaphila*.*

**Nikolas M. Isely**, University of Otago, Dunedin, New Zealand, *Effects of increased UV and sea ice retreat on Antarctic marine larvae.*

**Karen Knee**, Stanford University, Stanford, Calif., and University of California, Santa Cruz, *Submarine groundwater discharge and coastal water quality on the Kona Coast: The land use connection.*

**Yun Li**, University of Maryland Center for Environmental Science, Cambridge, *Impact of Hurricane Isabel on hypoxia in Chesapeake Bay.*

**Hiroaki Tsushima**, Tohoku University, Sendai, Japan, *Noise reduction of ocean-bottom pressure data toward real-time tsunami forecasting.*

**Laure E. Zanna**, Harvard University, Cambridge, Mass., *Nonnormal thermohaline circulation dynamics in an idealized ocean GCM.*

### Paleoceanography and Paleoclimatology (PO)

**Jennifer A. Arbuszewski**, Lamont-Doherty Earth Observatory, Columbia University, Palisades, N. Y., *Towards a global calibration and validation of the *G. ruber* (white) Mg/Ca paleothermometer.*

**Alyson Cartwright**, University of Arizona, Tucson, *South American pluvial lakes: Implications for quaternary climate change.*

**Hitoshi Hasegawa**, Department of Earth and Planetary Science, University of Tokyo, Tokyo, Japan, *Drastic shrinking of the Hadley circulation in the mid-Cretaceous supergreenhouse.*

**Clayton Magill**, Pennsylvania State University, University Park, *Organic matter response to orbital rhythms at Olduvai Gorge c. 1.80 Ma.*

**Gema Martinez-Mendez**, Institut de Ciència i Tecnologia Ambientals, Universitat Autònoma, Barcelona, Spain, *Influence of Agulhas leakage on the meridional overturning circulation (MOC): Insights from paired planktonic and benthic foraminifera stable isotope and trace metal analyses over the last 345 kyr.*

**Clare C. Williams**, College of Marine Science, University of South Florida, St. Petersburg, *Meltwater and abrupt climate change in the Gulf of Mexico during the last glacial termination.*

### Planetary Sciences (P)

**Bethany L. Ehlmann**, Brown University, Providence, R. I., *Diverse alteration minerals around Martian impact craters revealed by MRO-CRISM: Indicators of hydrothermal activity or subsurface aqueous alteration?*

**Alexander G. Hayes**, California Institute of Technology, Pasadena, *Titan's global lake distribution and implied hydrocarbon hydrology from Cassini SAR imagery and topography.*

**Catherine S. Plesko**, University of California, Santa Cruz, and Los Alamos National Laboratory, Los Alamos, N. M., *Volatile mobilization by large impacts: Constraining the initial conditions of an impact-generated Martian greenhouse.*

**Lauren Wye**, Stanford University, Stanford, Calif., *Surface parameters of Titan feature classes from Cassini radar backscatter measurements.*

# BOOK REVIEW

## Planet Mars: Story of Another World



*François Forget, François Costard, and Philippe Lognonné*  
Springer Praxis; x + 231 pp.; ISBN 978-0-387-48925-4; \$39.95

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Mars has captured the imagination of people throughout the ages, inspiring many stories. Remarkably, though, little was known about the red planet until recently. Through a

great deal of exploration and theory, planetary scientists have striven to correct this situation.

Over the course of the past half century, since the first flyby of Mars by NASA's Mariner 4 spacecraft in 1967, a multitude of probes have landed on, orbited, and flown

past the planet. From these missions, a great deal has been learned about Mars. Its surface has now been studied to a respectable level of detail, revealing an astonishing amount of information about volcanoes such as Olympus Mons in Mars's Tharsis region; about the gigantic Valles Marineris (Valley of Wonder), the largest known canyon in the solar system; and about lava flows, outflow channels, and the Martian regolith, among many other aspects of the planet. This level of detail is made more incredible because of the difficulty in gathering such information. And there is still a staggering wealth of learning left to do. This book provides an overview of the current understanding of the past and present state of Mars, and a brief introduction to the planet.