

CURRICULUM VITAE

Donglai Gong

Institute of Marine and Coastal Sciences, Rutgers University
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EDUCATION

- 2009 Ph.D. Oceanography, Rutgers University, New Brunswick, NJ. Thesis Advisor: Scott Glenn
- 2004 S.M. Physics, Massachusetts Institute of Technology, Cambridge, MA. Thesis Title: Quasar spectroscopy in UV and X-ray- probing the intergalactic medium using helium and oxygen. Thesis Advisors: Scott Burles and Claude Canizares
- 2001 B.S. Physics, B.A. Mathematics, with Highest Honor, Rutgers University, New Brunswick, NJ. Senior Thesis Title: Electron-Phonon Interaction in Thin Films of Hf at Ultra-Low Temperatures. Thesis Advisor: Michael Gershenson

RESEARCH & TEACHING EXPERIENCE

- 2007-Pres. Research Assistant, Marine and Coastal Sciences, Rutgers University
- 2007 Fall Guest Lecturer, Human Ecology, Rutgers University
- 2007 Spr. Participant of Communicating Ocean Sciences to Informal Audiences (COSIA) in collaboration with Liberty Science Center
- 2006 Teaching Assistant, Physical Oceanography, Rutgers University
- 2005 Research Assistant, Marine and Coastal Sciences, Rutgers University
- 2004-2005 Research Engineer, Coastal Ocean Observations Lab, Rutgers University
- 2001-2004 Research Assistant (observational astrophysics), Center for Space Research, Department of Physics, MIT
- 2001 Research Assistant, Department of Physics, Rutgers University
- 2000 Teaching Assistant, Department of Physics, Rutgers University
- 2000 ViGRE Research Assistant, Department of Mathematics, Rutgers University
- 1999-2000 Henry Rutgers Scholar, Undergraduate Thesis Project, Rutgers University
- 1999 REU, High Altitude Observatory at National Center for Atmosphere Research, Boulder, CO
- 1998 Undergraduate Research Assistant at Los Alamos National Laboratory
- 1998 Undergraduate Research Assistant, Department of Physics and Astronomy, Rutgers University
- 1997 REU (NSF Research Experience for Undergraduate), Department of Physics, University of Michigan

ACADEMIC HONORS

2002 NSF Graduate Fellowship Honorable Mention
2001 Graduating with Highest Honor, Rutgers University
2001 Phi Beta Kappa Honor Society
2000 Richard T. Weidner Prize (Outstanding Achievement as a Physics Major)
1999 Henry Rutgers Scholar (Undergraduate thesis)
1999 Mary Wheeler Wigner Memorial Scholarship (Physics)
1998 Rutgers College Merit Scholarship
1998 Golden Key National Honors Society

PROFESSIONAL AFFILIATIONS

2005--Pres. American Geophysical Union
1996--2004 American Physical Society
1997--2001 Society of Physics Students
1997--1998 American Institute of Astronautics and Aeronautics

TECHNICAL & PROGRAMMING SKILLS

Multi-dimensional data visualization/analysis; hydrographic/biogeochemical sampling (CTD, O₂, HPLC, chlorophyll, nutrients); Slocum Glider/AUV deployment/recovery; VPR deployment/recovery; open water sailing; GPS navigation; Marine Radio and Radar operations; skipper (sailing vessel up to 16 meters); PADI Advanced Open Water Scuba Certification; wired/wireless network administration; Class 100 Clean Room operations; photolithography; ultra high vacuum systems; liquid helium/nitrogen; metal ion deposition system; high speed electronics and lasers often used in experimental physics laboratories; Matlab; IDL; Java; C; FORTRAN; Ruby; Mathematica; LabView; HTML

PUBLICATIONS

“Characterizing summer time shelf-slope exchange processes on the New Jersey Shelf” **D. Gong**, R. Castelao, J. Kohut, O. Schofield, S. Glenn, *in prep.*

“COOL Observations on the Biogeochemistry of the Mid-Atlantic Bight” O. Schofield, B. Cahill, R. Castelao, J. Kohut, R. M. Chant, **D. Gong**, S. Glenn, X. Yi, *Eos Trans. AGU*, 88(23)

“Quasar spectroscopy in UV and X-ray- probing the intergalactic medium using helium and oxygen” **D. Gong**, MIT Archive, S.M. Thesis, 2004

“Millisecond electron-phonon relaxation in ultrathin disordered metal films at millikelvin temperatures” M. E. Gershenson, **D. Gong**, and T. Sato, *Appl. Phys. Lett.* 2001, 79, 2049

M. E. Gershenson, **D. Gong**, T. Sato, B. S. Karasik, W. R. McGrath, and A. V. Sergeev, Proc. of 11th Int. Symp. on Space Terahertz Technology, Ann Arbor, MI, 2000, pp. 514-523

“On the Twist of Emerging Flux Loops in the Solar Convection Zone” Y. Fan, **D. Gong**, Solar Phys. 2000, 192, 141

“Electron-Phonon Interaction in Thin Films of Hf at Ultra-Low Temperatures” **D. Gong**, Rutgers University Library, Thesis Special Collection, 2000

PAPERS PRESENTED AT CONFERENCES

Characterizing Summertime Shelf-slope Exchange Processes on the NJ Shelf. **D. Gong**, Mid-Atlantic Bight Physical Oceanography Meeting, New Brunswick, NJ, 2007 (talk)

NJ Turnpike - Transport Pathways on the NY Bight. **D. Gong**, S. Glenn, R. Chant, J. Wilkin, J. Kohut, AGU/ASLO Ocean Sciences Meeting, Honolulu, Hawaii, 2006 (talk)

Coastal Plume & Shelf Circulation - LaTTE 2005 Remote Sensing Results. **D. Gong**, J. Bosch, R. Chant, J. Kohut, H. Roarty, Gordon Research Conference on Coastal Ocean Circulation, New London, NH, 2005 (poster)

The time varying structure of a river plume: Observations with an autonomous glider. R. J. Chant, S. M. Glenn, **D. Gong**, American Geophysical Union, Fall Meeting, San Francisco, 2004

Statistical Analysis of Surface Currents Off the Coast of NJ/NY – Initial Study. **D. Gong**, S. Glenn, R. Chant, J. Kohut, H. Roarty, J. Bosch, American Geophysical Union, Fall Meeting, San Francisco, 2004 (poster)

PROFESSIONAL SERVICES

2007--2008 President, Oceanography Graduate Student Association, Rutgers University, NJ
2007 Fall National Ocean Science Bowl, Physical Oceanography Technical Advisory Panel, Consortium for Oceanographic Research and Education, Washington, D.C.
1998--1999 President, Society of Physics Student, Rutgers University, NJ
1997--1998 Vice President, American Institute of Astronautics and Aeronautics, Student Chapter, Rutgers University, NJ

LANGUAGES

English and Chinese