

RAMON E. LOPEZ

Preparation: B.S. (Physics), University of Illinois at Urbana-Champaign, 1980
M.S. (Space Physics), Rice University, 1984
Ph.D. (Space Physics), Rice University, 1986

Appointments:

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| Aug 2004 – Present | Professor, Department of Physics and Space Sciences Florida Institute of Technology, Melbourne, Florida |
| Aug 1999 -Aug 2004 | C. Sharp Cook Distinguished Professor, Dept. of Physics, University of Texas at El Paso (UTEP) |
| Aug 1999 - June 2001 | Chair, Dept. of Physics, UTEP |
| May 1994 - June 1999 | Director, Education and Outreach, The American Physical Society |
| July 1993 - Aug 1999 | Associate Research Scientist, Department of Astronomy, University of Maryland at College Park (UMCP) |
| April 1993 - June 1994 | Asst. Director for Research, East-West Space Science Center, UMCP |
| June 1992 - July 1993 | Research Associate, Department of Astronomy, UMCP |
| Dec. 1985 - June 1992 | Scientist (various ranks), Applied Research Corporation (on contract to The Johns Hopkins University Applied Physics Laboratory) |
| Aug. 1985 - Dec. 1985 | Postdoctoral Research Fellow, Rice University, Department of Space Physics and Astronomy |

5 Relevant Publications:

1. Lopez, R. E., An interdisciplinary undergraduate space physics course, *Journal of College Science Teaching*, 263-269, Feb, 1996.
2. Lopez, R. E., and T. Schultz, Two revolutions in K-8 science education, *Physics Today*, September, 44-49, 2001.
3. Lopez, R. E., Space Science Education: The Emergence of a Professional Community, in *NASA Office of Space Science Education and Public Outreach Conference*, Eds. C. Narasimhan, B. Beck-Winchatz, I. Hawkins and C. Runyon, ASP, 213-218, Vol. CS-319, 2004.
4. Lopez, R. E., and K. Hamed, Student Interpretations of 2-D and 3-D Renderings of the Substorm Current Wedge, *J. Atmos. Sol. Terr. Phys.*, 66, 1509, doi:10.1016/j.jastp.2004.03.03, 2004.
5. *Space Science Education*, *Adv. Space Research*, Vol 34, no.10, edited by R. E. Lopez, and C. A. Morrow, 2004

Plus an additional 77 refereed and 25 unrefereed publications, one book (*Storms from the Sun*, National Academy Press, 2002), and 91 invited papers, seminars, and colloquia.

Synergistic Activities

1. Research in space science education and outreach as evidenced by publications (2 cited above), organization of space science education sessions at COSPAR meetings, and numerous invited presentations on the subject, included on the use of visualization (Invited presentation at "Teaching with Visualizations: A Workshop", San Francisco, CA, December, 12, 2004)
2. Leadership in promoting diversity in space physics as evidenced by work in the Society for the Advancement of Chicanos and Native Americans in Science (SACNAS),

participation in the organizing committee of the NASA Chicago 2004 workshop, assisting Alabama A&M University to build a space science major at an HBCU, and other committee service and presentations.

3. Leadership in physics education reform as evidenced by election to Chair (for 2005), of the APS Forum on Education; Member, Site Visit Teams, NSF, Educational Systemic Reform; and Co-Organizer, 2003 AAPT Conference on the Introductory Calculus-based Physics Course, and other committee service and presentations.
4. Member, NRC Committees: Committee on Undergraduate Science Education 2002-2003; Chair, Panel on Education and Society, NRC Decadal Survey for Solar and Space Physics 2001-2003; Member, Board on Atmospheric Sciences and Climate Ad-Hoc Committee on Strategic Guidance for NSF's Support of the Atmospheric Sciences, August 2004 – present.

Collaborators and Co-Editors

Dan Baker, University of Colorado
Elia Benitez-Marquez, Univ. of TX El Paso
Robert Beichner, North Carolina State U.
Charles Goodrich, Boston University
Antonella Greco, University of Calabria, Italy
Kastro Hamid, Univ. of TX El Paso
Salavador Hernandez, Florida Tech
John Lyon, Dartmouth College
Cheri Morrow, Space Science Institute
Harlan Spence, Boston University
Alexandre Taktakishvili, Florida Tech
Niescja Turner, Florida Tech
Mike Wiltberger, NCAR/HAO
Gaetano Zimbardo, University of Calabria, Italy

Graduate and Post-Doctoral Advisors

Graduate Advisor – John Freeman, Rice University
Post-Doctoral Advisors – Richard McEntire JHU/APL, Tom Potemra (Deceased)

Thesis advisor for the following students:

Past students

Roberto Arceo, graduated with M.S. from Univ. of TX El Paso, now at NM State University as a Ph.D. student
Elia Benitez-Marquez, graduated with M.S. from Univ. of TX El Paso, now at Univ. of TX El Paso as a Ph.D. student
Robert Bruntz, graduated with M.S. from Univ. of TX El Paso, now employed at Florida Tech
Alejandro Lugo-Solis, graduated with M.S. from Univ. of TX El Paso, now at University of NM as a Ph.D. student
Plamen Krsatev, graduated with M.S. from Univ. of TX El Paso, now at University of Idaho as a Ph.D. student

Current Students

Salvador Hernandez, Ph.D. student at Florida Tech, scheduled to graduate May 2006.
Ismael Diaz, 1st year graduate student at Florida Tech
Sibo Quan, 1st year graduate student at Florida Tech