

## Vita – David J. Raymond

Professor of Physics, New Mexico Institute of Mining and Technology, Socorro, New Mexico 87801

- Education and Experience

- 1961 - 1965: Rensselaer Polytechnic Institute – B.S. in Physics.
- 1965 - 1970: Stanford University – Ph.D. in Physics. NSF Graduate Fellow for 4 years. Graduate advisor – Melvin Schwartz.
- 1970 - 1973: Held joint appointment as Assistant Meteorologist with Cloud Physics Observatory, Dept. of Meteorology, University of Hawaii, and Assistant Professor of Physics, Hilo College, Hilo, Hawaii.
- 1973 - 1974: Research Associate, New Mexico Institute of Mining and Technology.
- 1974 - 1979: Asst. Prof. of Physics, New Mexico Institute of Mining and Technology.
- 1979 - 1983: Assoc. Prof. of Physics, New Mexico Institute of Mining and Technology.
- 1983 - present: Prof. of Physics, New Mexico Institute of Mining and Technology
- 1985 - 1994: Chairman, Dept. of Physics, New Mexico Institute of Mining and Technology.
- 2001-2002: Sabbatical leave, Centro de Ciencias de la Atmósfera, Universidad Nacional Autónoma de México.

- Recent Professional Service

- Head of the Scientific Working Group for the EPIC2001 project.
- Member and 2007 Chair of the HIAPER Scientific Advisory Committee.

- Professional Honors

- Recipient of New Mexico Tech’s “Distinguished Research Award” for 1995.
- Recipient of the American Meteorological Society’s “Reviewer’s Award” for the Journal of the Atmospheric Sciences, 1996.

- Professional Memberships

- American Physical Society
- American Meteorological Society
- Royal Meteorological Society
- American Geophysical Union

- Collaborators in Past 48 Months

- Chris Bretherton, University of Washington
- Željka Fuchs, New Mexico Tech
- Carlos López-Carrillo, New Mexico Tech
- John Molinari, SUNY Albany
- Graciela Raga, Universidad Nacional Autónoma de México
- Sharon Sessions, New Mexico Tech
- Lynn Shay, University of Miami
- Xiping Zeng, University of Maryland, Baltimore

- Five Relevant Publications

**Raymond**, D. J., C. López-Carrillo, and L. López Cavazos, 1998: Case-studies of developing east Pacific easterly waves. *Quart. J. Roy. Meteor. Soc.*, **124**, 2005-2034.

**Raymond**, D. J., and X. Zeng, 2005: Modeling tropical atmospheric convection in the context of the weak temperature gradient approximation. *Quart. J. Roy. Meteor. Soc.*, **131**, 1301-1320.

**Raymond**, D. J., 2007: Testing a cumulus parameterization with a cumulus ensemble model in weak temperature gradient mode. *Quart. J. Roy. Meteor. Soc.*, **133**, 1073-1085.

**Raymond**, D. J. and Sharon L. Sessions, 2007: Evolution of convection during tropical cyclogenesis. *Geophys. Res. Letters*, **34**, L06811, doi:10.1029/2006GL028607.

**Raymond**, D. J., S. L. Sessions, and Ž. Fuchs, 2007: A theory for the spinup of tropical depressions. *Quart. J. Roy. Meteor. Soc.*, **133**, 1743-1754.

- Five Other Significant Publications

**Raymond**, D. J., 2000: Thermodynamic control of tropical rainfall. *Quart. J. Roy. Meteor. Soc.*, **126**, 889-898.

**Raymond**, D. J., G. B. Raga, C. S. Bretherton, J. Molinari, C. López-Carrillo, and Ž. Fuchs, 2003: Convective forcing in the intertropical convergence zone of the east Pacific. *J. Atmos. Sci.*, **60**, 2064-2082.

**Raymond**, D. J., S. K. Esbensen, C. Paulson, M. Gregg, C. S. Bretherton, W. A. Petersen, R. Cifelli, L. K. Shay, C. Ohlmann, and P. Zuidema, 2004: EPIC2001 and the coupled ocean-atmosphere system of the tropical east Pacific. *Bull. Am. Meteor. Soc.*, **85**, 1341-1354.

**Raymond**, D. J., C. S. Bretherton, and J. Molinari, 2006: Dynamics of the intertropical convergence zone of the east Pacific. *J. Atmos. Sci.*, **63**, 582-597.

**Raymond**, D. J., and Ž. Fuchs, 2007: Convectively coupled gravity and moisture modes in a simple atmospheric model. *Tellus*, **59A**, 627-640.