

Curriculum Vitae

M. D. Corcoran

PERSONAL INFORMATION

Marjorie Corcoran
Professor of Physics and Astronomy
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EDUCATION

Ph. D. in Physics, Indiana University, 1977
Bachelor of Science in Physics, University of Dayton, 1972

PROFESSIONAL EXPERIENCE

Speaker, Faculty Senate of Rice University, 2005-2007
Chair of the Physics Department, Rice University, 1994-1998
Professor of Physics, Rice University, 1992-
Visiting Associate Professor of Physics, University of Chicago, 1990
Associate Professor of Physics, Rice University, 1986-1992
Assistant Professor of Physics, Rice University, 1981-1986
Visiting Assistant Professor of Physics, Rice University, 1980-1981
Senior Research Associate in Experimental High Energy Physics, T. W. Bonner Nuclear Laboratories, Rice University, October 1979-August 1980
Post Doctoral Research Position, University of Wisconsin, September 1977-October 1979
Research Associate in Experimental High Energy Physics, Indiana University, 1973-1977

RESEARCH INTERESTS

CP violation and tests of fundamental symmetries
Physics beyond the Standard Model

RESEARCH ACTIVITIES

Fermilab Collider Experiment D0.
D0 Institutional Board Chair 2008-2009
Fermilab Experiments E832 and E799II, Study of CP violation in the neutral Kaon system and the study of rare K_L decays
Fermilab E683, Photoproduction of high p_t Jets, spokesperson

HONORS AND AWARDS

University of Wisconsin–Madison, Department of Physics,
Distinguished Scientist Award, May 2008
NSF Visiting Professorship for Women, University of Chicago, 1990
Fellow of the American Physical Society, Division of Particles and Fields
Junior Investigator Grant, US Department of Energy, 1980

PROFESSIONAL AND OUTREACH ACTIVITIES

Quarknet High School Teacher Program, ongoing program started in 2004
British Marshall Scholarship Review Panel, Southwest Region, 1997-present
Fermilab Board of Overseers, June 1997-2004
High Energy Physics Advisory Panel (HEPAP), October 1997-October 2000
Texas National Research Laboratory Research and Development Panel, 1990-1992
Fermilab Users Executive Committee, 1987-1989

SELECTED PUBLICATIONS

Measurement of the WW production cross section with dilepton final states in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV and limits on anomalous trilinear gauge couplings, D0 collaboration, submitted to Phys. Rev. Lett.

Observation of the doubly strange b baryon Ω_b , D0 Collaboration, Phys. Rev. Lett. 101:232002 (2008).

First study of the radiation-amplitude zero in $W\gamma$ production and limits on anomalous $WW\gamma$ couplings in $\sqrt{s}=1.96$ TeV, D0 collaboration, Phys. Rev. Lett 100:241805 (2008).

Search for Lepton Flavor Violating Decays of the Neutral Kaon, KTeV collaboration, Phys. Rev. Lett. 100:131803 (2008)

Determination of the Parity of the Neutral Pion via the Four-Electron Decay, KTeV Collaboration, Phys. Rev. Lett. 100:182001 (2008).

A Determination of the CKM Parameter $|V(us)|$, KTeV collaboration, Phys. Rev. Lett. 93:181802 (2004).

Measurements of Direct CP Violation, CPT Symmetry, and other parameters in the neutral kaon system, KTeV collaboration, Phys. Rev. D67:012005 (2003).

GRADUATE STUDENTS

Chris Moore, PhD 1989, Industry
Don Lincoln, PhD 1993, Fermilab staff scientist
Greg Morrow, PhD 1998 Industry
Angela Bellavance, PhD 2002, applications physicist at Fermilab
Michael Cooke, PhD 2008, Post doctoral position at Fermilab