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Work Address:

Department of Physics & Astronomy
University of South Carolina
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Education & Training

- **Research Associate [Oct 1983 – Apr 1986] and Wilson Fellow Apr 1986 – Jul 1988**
Fermi National Accelerator Laboratory, IL.
Developed trigger for E691 experiment, proposal for E791 experiment, and publications.
- **Ph.D., Experimental High Energy Physics. October 1983**
California Institute of Technology, Pasadena, CA.
- **M.S., Physics. June 1978**
Indian Institute of Technology, New Delhi, India.

Research and Professional Experience

- **Professor. Aug 1999 – present**
Univ. of South Carolina, Columbia, SC.
 - Studied / studying Upsilon (4S) branching fractions, charm semileptonic decays, CP violation, particle identification, muon detectors, Higgs physics, physics beyond the standard model.
 - Co-convenor of the BaBar Particle ID group.
 - Convenor of the Charm Heavy Flavor Averaging Group.
 - Member of the BaBar collaboration to study CP violation and heavy quark properties at the Stanford Linear Accelerator Center (SLAC).
 - Member of the BaBar publications Board, 2001-2004.
 - Co-spokesman of the Fermilab E791 collaboration.
- **Associate Professor. Jun 1994 – Aug 1999**
Univ. of South Carolina, Columbia, SC.
 - Studied D^0 mixing, charm baryons, the D_s lifetime, CP violation and charm production.
 - Member of the BaBar collaboration to study CP violation and heavy quark properties at the Stanford Linear Accelerator Center (SLAC).
 - Co-spokesman of the Fermilab E791 collaboration.
- **Assistant Professor. Jul 1988 – Jun 1994**
Princeton University, Princeton, NJ.
 - Built a high-speed readout of the E791 silicon vertex system, wrote Monte Carlo and silicon track reconstruction software.
 - Co-spokesman of the Fermilab E791 collaboration.

Awards, Offices / Leadership Positions

- Co-convenor of the BaBar Particle ID group 2004 – present.
- Convenor of the Charm Heavy Flavor Averaging Group 2006 – present.
- **Member of the BaBar Publications Board**, 2001 – 2004.
- Organizing Committee, PANIC 2000 conference.
- **DOE Outstanding Junior Investigator Award**, 1989 – 1994.
- **Co-Spokesperson, Fermilab Experiment E791**, 1988 – present.
- Member, User's Executive Committee, Fermilab, 1991 – 1993.
- Organizing Committee, Workshop on Hadron Structure Functions and Parton Distributions, 1990.
- **Wilson Fellow, Fermilab**, 1986 – 1988.
- **National Science Talent Search Scholar** 1973 – 1978 (India).

Selected Talks, 2004-07

- “Searching for A_{CP} in $D^+ \rightarrow K^+K^-\pi^+$ decays with 1 ab^{-1} ”, talk given at the BaBar "1/ab" Physics Workshop.
- “Future Perspectives for Charm Physics at a B factory” invited talk at the Workshop on Discoveries in Flavour Physics at e+e- Colliders, Frascati, Italy, Feb.-Mar. 2006.
- “Dalitz Analysis in Charm Meson Decays” invited talk at the Three-Body Charmless B-decays Workshop, Paris, France, Jan.-Feb. 2006.
- “Particle ID systematic Errors” invited talk at Analysis Tools workshop, SLAC, Oct. 2005.
- “Searches for direct CP violation in D^+ decays and for D^0 - D^0 bar mixing” invited talk at the International Conference on High Energy Physics, 2004, Beijing, China.

Selected Publications, 2004-2007

- “Measurements of branching fractions, polarizations and direct CP-violation asymmetries in $B \rightarrow \rho K^*$ and $B \rightarrow f_0(980)K^*$ decays”, B. Aubert *et al.*, Phys. Rev. Lett., 97, 201801 (2006).
- “A Search for CP violation and a measurement of the relative branching fraction in $D^+ \rightarrow K^- K^+ \pi^+$ decays”, by B. Aubert *et al.*, Phys. Rev. D71, 091101 (2005).
- “Measurement of the B^\pm / B^0 Production Ratio from the Y(4S) Meson using $B \rightarrow J/\Psi K$ and $B^0 \rightarrow J/\Psi K_s^0$ Decays”, by B. Aubert *et al.*, Phys. Rev. D69, 071101 (2004).
- BaBar Analysis Document notes 1652, 1465, 1215, 1074, 945, 599, 529.