interested in collaboration: WASA member Kavita Lalwani (MNIT Jaipur)

Measurement of the branching ratio of a rare decay eta->pi^{0} gamma gamma with WASA-at-COSY
Kavita Lalwani, Doctoral Thesis, IIT Bombay, India, 2010

Malaviya National Institute of Technology Jaipur
मालवीय राष्ट्रीय प्रौद्योगिकी संस्थान जयपुर

Dr. Kavita Lalwani

Designation :Assistant Professor
Qualifications :Ph.D.(Experimental High Energy Phys.) from Indian Institute of Technology Bombay
M.Phil.(Physics) from M.D.S University, Bhilwara Rajasthan
M.Sc.(Physics) from University of Kota, Rajasthan
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Research Interests

Hadron Structure, Physics beyond the Standard Model, CP Violation, Lepton Flavor Violation, Proton Computed Tomography, Silicon Sensor development.

Brief Research Profile

I am working with following two International Collaborations: 1) Belle at KEK, Japan: Involved in the hardware and software activities of Silicon Vertex Detector for Belle II. In addition, our group is also involved in the physics analyses of D- meson decays and Upsilon decays to study the CP violation and Lepton Flavor violation, respectively. 2) WASA-at-COSY, Germany: Physics analysis for the production and decays of eta meson.

interested in collaboration: WASA member Kavita Lalwani (MNIT Jaipur)

research experience:

Physics Analyses:

1) Precision measurement of the branching fraction of rare decay of light mesons.
2) CP Violation studies

Hardware and Software Activities

1)Participation in the up-gradation of experimental facility (installation, commissioning and testing of detector system, preference will be given for Silicon Detectors or Scintillation detectors)
2) Cosmic Ray studies before actual physics run begins.
3) Participation in the reconstruction software, in particular the development of the track reconstruction algorithm.
4) Detector monitoring shifts during the experimental period.
5) Monte Carlo Production shifts
6) Detector Simulations and Design Optimization studies using Geant4.

Manpower

1)Two Ph.D. students and Myself will be involved for this proposed work.
2) Fellowship for students will come from MHRD, Govt of India.