

Shashank Shalgar, Ph.D. candidate

Work Address:

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Contact

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Education:

2007–Present : Ph.D. Physics Northwestern University
Adviser: André de Gouvêa

2001–2003 : M.Sc. Physics,
S.N.Bose National Center for Basic Sciences.

1998–2001: B.Sc. Physics,
Fergusson College, Pune.

Work Experience

2003–2007 : Research Fellow at India-based Neutrino Observatory

Graduate Fellowships and Assistantships

2007–2008: Huang Fellowship, Northwestern University
2008–2009: Teaching Assistant, Northwestern University & Argonne National Lab
2009–2010: Teaching Assistant, Northwestern University
2011–2012: Teaching Assistant, Northwestern University

Publications

Measurement of mass hierarchy with atmospheric neutrinos (with Raj Gandhi, Pomita Ghoshal, Srubabati Goswami, Poonam Mehta, S Uma Sankar) [[arXiv:0707.1723](#)]

Implications of Higgs discovery in the MSSM Golden region (with Ian Low) [[arXiv:0901.0266](#)]

Atmospheric tau neutrinos in multi-kiloton Liquid Argon detector (with Janet Conrad, André de Gouvêa, and Joshua Spitz) [[arXiv:1008.2984](#)]

Parametrising Majorana Neutrino couplings in Higgs sector (with André de Gouvêa and Wei-Chih Huang) [[arXiv:1007.3664](#)]

Effect of Transition Magnetic Moments on Collective Supernova Neutrino Oscillations (with André de Gouvêa) [[arXiv:1207.0516](#)]

Transition Magnetic Moments and Collective Neutrino Oscillations: Three-Flavor Effects and Detectability (with André de Gouvêa) [[arXiv:1301.5637](#)] (in communication)

Contributed Conference Talks

Atmospheric Tau Neutrinos in a Multi-kiloton Liquid Argon Detector Pheno 2010 Symposium, Madison, Wisconsin, May 10, 2010.

Teaching

Participant of *Graduate Teaching Certificate Program (Searle Center for Teaching Excellence)*, a 12 months program that includes reading literature on teaching and learning, and use that scholarship to reflect upon teaching practice.

Teaching Assistant for 100-level Laboratory sessions for 7 quarters.

Relevant Skills

Computer languages: C,C++,Fortran,Python

Software Packages: MG/ME, Calchep, Feynrules, Mathematica, SAGE, Globes, Geant4, Nuance, QT (Graphical User Interface)

Professional Activities

Northwestern University HEP Journal Club (<http://nuhep.wikispaces.com/>)

Mathematical Physics Seminar (2008-09) (<http://numps.wikidot.com/>)

References

Dr. André de Gouvêa

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Dr. Ian Low

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Dr. Heidi Schellman

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