

Ranjan Dharmapalan

Argonne National Laboratory
HEP Division (Building 362)
9700 S. Cass Avenue
Argonne, IL 60439

Phone: (205) 887-2242
Email: ranjan@fnal.gov

Education

Ph.D. Physics, The University of Alabama, December 2012.

M.S. Physics, The University of Alabama, May 2010 .

Research Experience

Post-doctoral Researcher at Argonne National Laboratory (April 2014 – present)

Data analysis and detector calibration for the NOvA neutrino experiment. Research and development of next-generation photodetectors used in experimental particle physics and industry.

Research Associate at Indiana University, Bloomington (Nov 2013 – March 2014)

Study the physics possibilities of the MiniBooNE+ experiment and data analysis for the MiniBooNE dark matter search.

Graduate Assistant at The University of Alabama (Jun 2005 – Dec 2012)

Measurement of the antineutrino neutral current elastic scattering cross section in MiniBooNE. Search for *light* dark matter particles in MiniBooNE.

Honors and awards

- Universities Research Association (URA) Fermilab visiting scholars program award to “Search for *light* dark matter at MiniBooNE”.
- Outstanding Teaching Assistant : 2009, Dept. of Physics, The University of Alabama.

Publications

Articles with major contribution

R.Dharmapalan *et al.* “MCP-based photodetectors for cryogenic applications” JINST 11 no.02 C02019 (2016).

A. A. Aguilar-Arevalo *et al.* [MiniBooNE Collaboration], “Measurement of the Antineutrino-Nucleon Neutral-Current Elastic Cross Section,” Phys. Rev. **D91**, 012004 (2015)[arXiv:1309.7257 [hep-ex]] (2013).

R. Dharmapalan *et al.* [MiniBooNE Collaboration], “Low Mass WIMP Searches with a Neutrino Experiment: A proposal for Further MiniBooNE Running,” [arXiv:1211.2258 [hep-ex]] (2012).

R. Dharmapalan [MiniBooNE Collaboration], “Neutral Current Elastic Interactions in MiniBooNE,” AIP Conf. Proc. **1405**, 89 (2011) [arXiv:1110.6574 [hep-ex]].

R. Dharmapalan [MiniBooNE Collaboration], “Neutrino and Antineutrino Cross sections at MiniBooNE,” AIP Conf. Proc. **1382**, 271 (2011) [arXiv:1110.4603 [hep-ex]].

J. Grange and R. Dharmapalan [MiniBooNE Collaboration], “New Anti-Neutrino Cross-Section Results from MiniBooNE,” [arXiv:1304.7395 [hep-ex]] (2013).

Interests

Reading a good book. Playing table tennis (11 points/40 mm), tennis (beginner, always looking for a game), watching college football (Roll Tide!) and test match cricket.