RISE report

Andrew Furmanski November 2019

MicroBooNE

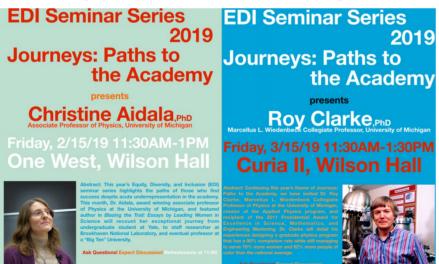
- Served as Cross Section group convener
 - Organise meetings, advise on analysis/publication strategy
 - Being based at Fermilab makes working with analysers significantly more efficient
- Developed analysis of charged-current interactions with final-state protons
 - Working directly with three other MicroBooNE collaborators, all of whom were primarily based at Fermilab during my secondment
 - Analysis and publication now in MicroBooNE internal review

Publications

- Managed the writing, review, and release, of multiple MicroBooNE papers:
 - Charged-current inclusive cross section measurement
 - Phys. Rev. Lett. 123, 131801 (2019)
 - Neutral pion production cross section measurement
 - Phys. Rev. D 99, 091102® (2019)
 - Rejecting cosmic backgrounds
 - Eur. Phys. J. C. 79: 673 (2019)

Supporting the Fermilab community

- I have served as an elected officer of the Fermilab Student and Postdoc Association (FSPA)
- Organise a series of events to foster the community, and support the careers of young people at Fermilab
- Also organised New Perspectives, a student/postdoc conference





Advocating for science

- Travelled to Washington DC to advocate for the funding of high-energy physics
 - Particular focus on the US-based liquid argon neutrino program
- Met with ~10 congressional offices

