

# 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<sup>®</sup> (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

**EDI Seminar Series 2019**  
**Journeys: Paths to the Academy**  
presents  
**Christine Aidala, PhD**  
Associate Professor of Physics, University of Michigan  
Friday, 2/15/19 11:30AM-1PM  
One West, Wilson Hall



Abstract: This year's Equity, Diversity, and Inclusion (EDI) seminar series highlights the paths of those who find success despite acute underrepresentation in the academy. This month, Dr. Aidala, award winning associate professor of Physics at the University of Michigan, and featured author in *Blazing the Trail: Essays by Leading Women in Science* will recount her exceptional journey from undergraduate student at Yale, to staff researcher at Brookhaven National Laboratory, and eventual professor at a "Big Ten" University.

Ask Questions! Expect Discussions! Refreshments at 11:30!

FSPA

**EDI Seminar Series 2019**  
**Journeys: Paths to the Academy**  
presents  
**Roy Clarke, PhD**  
Marcellus L. Wiedenbeck Collegiate Professor, University of Michigan  
Friday, 3/15/19 11:30AM-1:30PM  
Curia II, Wilson Hall



Abstract: Continuing this year's theme of Journeys to the Academy, we have invited Dr. Roy Clarke, Marcellus L. Wiedenbeck Collegiate Professor of Physics at the University of Michigan, creator of the Applied Physics program, and recipient of the 2011 Presidential Award for Excellence in Science, Mathematics, and Engineering Mentoring. Dr. Clarke will detail his experiences designing a genitive physics program that has a 90% completion rate while still managing to serve 70% more women and 92% more people of color than the national average.

Ask Questions! Expect Discussions! Refreshments at 11:30! Talk Starts at 12:00!

**New Perspectives 2019**  
in conjunction with the 52nd Fermilab Users Meeting  
A conference for early career researchers.

June 10-11  
Fermilab



Abstract submission deadline: May 12  
Registration deadline: June 3  
Information and registration: [fspa.fnal.gov/new-perspectives-2019](https://fspa.fnal.gov/new-perspectives-2019)

FSPA Fermilab Research Alliance LLC Fermilab

# 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

