

My focus on NOvA is astrophysical analyses in the Exotics group, while my focus in DUNE is the cosmic ray tracker for ProtoDUNE. The NOvA Exotics group, of which I am a convenor, primarily deals in astrophysics, including searches for a magnetic monopole component of cosmic rays, an effort to set a limit on dark matter in the Sun, supernovae, and studies of the cosmic ray flux. We also have beam analyses, with one search for neutrino magnetic moment and another for light dark matter that may be produced in the NuMI target. I will be personally working to analyze NOvA data in coincidence with the LIGO/VIRGO gravitational wave events. I will also be working to improve our sensitivity and physics impact for future events by receiving triggers from LIGO/VIRGO. My responsibilities on DUNE are to supply the DAQ software for the ProtoDUNE cosmic ray tracker (CRT) and to assist in the CRT installation. This system allows calibrations of space charge effects and electron lifetime that would otherwise not be possible, since ProtoDUNE will not have UV laser system.