Ethan Brown

Associate Professor at Rensselaer Polytechnic Institute
Troy, NY, US

Astrophysicist investigating the search for Dark Matter with XENON experiments and Neutrinoless Double Beta Decay with the nEXO experiment.

Biography

Ethan Brown's research is developing liquid xenon detectors for particle astrophysics experiments. His group focuses on the direct detection of dark matter and the search for neutrinoless double beta decay. As a member of the XENON100, XENON1T, XENONnT, and DARWIN dark matter experiments, and also the nEXO neutrinoless double beta decay experiment, his research focuses on development of techniques for operating high purity xenon detectors, including purification and diagnostics, as well as novel radiopure electrodes based on thin films. His research group also works on simulations and data analysis looking for new physics with these experiments.

Areas of Expertise

Neutrinoless Double Beta Decay, Particle Astrophysics, Dark Matter, XENONnT, Radiation Detector Development

Education

University of California San Diego
B.Sc. Physics

University of California Los Angeles
Ph.D. Physics