

Known Projects for P335

You are expected to create or find your own project that really interests you by talking with faculty, grad students, looking at web pages. Here I list those Projects I know of. It's possible that a faculty member may be willing to take on a 2nd student on a related topic if the first is taken, so you may want to contact the faculty even if a student's name is listed for the topic. But, above all, go find or invent a project that truly interests you. Then please tell me, and I'll add it to the table.

Current Table of Projects (in process)

Title	Professor	Student
Plasmonic enhancement of infrared detectors	Philippe Guyot-Sionnest	TBD
Spin blockade in one-dimensional quantum dot chains	Philippe Guyot-Sionnest	TBD
Optical nonlinearity of nanoantenna	Philippe Guyot-Sionnest	TBD
Detection of Dark Matter with an Argon TPC: development of a calibration system for PMT characterization	Luca Grandi	TBD
Dark Matter detection with CCDs: neutron calibration setup and SNOLAB data analysis	Paolo Privitera	TBD
Dark Matter detection with CCDs: 3D reconstruction from diffusion measurements	Paolo Privitera	TBD
Neutrinoless Double-Beta Decay Detector Development	Henry Frisch	TBD
Development of a Whole-Body 50-psec Time-of-Flight Positron-Emission Tomography Camera	Henry Frisch	TBD
Synthesis and Theory of High Quantum-Efficiency Bi-Alkali Photocathodes	Henry Frisch	TBD
ATLAS Level 1 Boosted Object Trigger Electronics Board	David Miller	TBD
The ADMX Axion Search Experiment	Stephen Meyer	TBD
Simulation, design, fabrication, and testing of radio antennas for the Greenland Neutrino Observatory	Abigail Viereggs	TBD
Topological mechanics: from meta-materials to meta-fluids	William Irvine	TBD