

Senior Theses Offered Recently in Physics and Astronomy

Name	Title of Thesis
Emily DeBaun	Nonlinear Dynamics of a Biological Cell in a Uniform Electric Field
Amanda Slagle	Vector Field Mapping and Analysis Using Finite Sensor Swarms
Michael Chilcote	Numerical and Experimental Investigations of Ionospheric Sounding Using AM Radio
Nicholas Knezek	An Analysis of Energetic Oxygen Interaction with Europe in the Jovian Magnetosphere
Aryeh J. Drager	Using Multimedia Pre-Lecture Assignments to Improve the Introductory Physics Experience
Benjamin N. Katz	Special-Relativistic Effects of a Microscale Oscillator on a Macroscopic Quantum State
Alexander W. Meill	Measurement-Based Quantum Computing in Nuclear Magnetic Resonance
Laurel Anderson	Experimental Control of Spin Chain Dynamics
Todd Anderson	Orbital Dynamics Model of a CubeSat Swarm Under Aerodynamic Torque in LEO
Spencer Diamond	Plasma Etch Characterization for Use in Cavity Optomechanics Experiment
Peter Horak	Attitude Estimation for Rocket-Borne Sensorcraft
Sarah Pasternak	Design and Early Verification of an Electrically Detected Magnetic Resonance (EDMR) System
Nathan Utterback	Kinematic Modeling and Analysis of the Galactic Supernova Remnant 3C58 (G130.7 + 3.1)
William Athol	Design and Validation of a Zero-Field and Low-Field EDMR System
Matthew Digman	Gravitational Anomaly in Anisotropic Spacetimes
Nina Maksimova	Testing Alternatives to the Standard Cosmological Model Using the Cosmic Microwave Background

