

Nuclear Engineering Seminar

Dr. Andrew Fairbanks,

Integrated Engagement Systems Department

Naval Surface Warfare Center Dahlgren Division

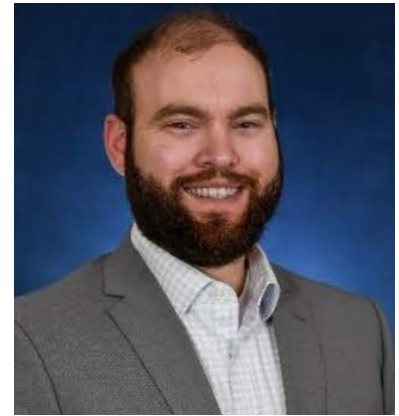
Wednesday, October 16, 2024

3:30 pm | MATH 175

Preparing for Today's and Tomorrow's Conflict

Abstract

Today's world is constantly evolving, and in doing so, presents a near-constant evolution of threats, adversaries, and challenges. The Naval Surface Warfare Center Dahlgren Division (NSWCDD), a research, development, test, and evaluation (RDT&E) center for the Department of the Navy, is charged with developing enabling capabilities to meet and defeat the threats posed by our adversaries. Among these enabling capabilities is the development of directed energy weapon systems – including high power laser and high power microwave weapon systems – for the Navy and joint warfighter. This talk will cover the mission of NSWCDD and how RDT&E into directed energy weapon systems provides critical capability to today's and tomorrow's warfighter. This talk will also discuss internship opportunities at NSWCDD available to students.



Dr. Fairbanks earned his bachelor's, master's, and doctorate degrees from the School of Nuclear Engineering at Purdue University. Dr. Fairbanks was a Pathways intern at Naval Surface Warfare Center Dahlgren Division in the high power microwave branch since May 2016 and is currently a Lead Engineer in the HPM Technology Development Branch. He conducts defense related research in pulsed power, HPM systems, HPM effects, and plasma systems. He has authored and coauthored numerous briefs, oral presentations, and peer-reviewed journal papers, on nonlinear composites and nonlinear transmission lines (NLTL).