Nuclear Science and Security Consortium

NSSC 7
NUCLEAR SCIENCE and SECURITY CONSORTIUM

Webinar

Overview of Research at LANL's Space Science and Applications Group

Dr. Shawn Tornga
Senior Project Leader,
Los Alamos National Lab

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3:00 - 4:00pm

View the live webcast at:
https://bluejeans.com/980565436

Abstract

Los Alamos National Laboratory is one of the world's largest science and technology institutions, conducting world-class research and development on topics integral to the U.S. nuclear deterrent and other national security matters, energy challenges, space exploration, medicine and supercomputing. The Intelligence and Space Research Division's Space Science and Application Group (ISR-1) is currently seeking graduate students and Post Doctoral fellows who would like to be part of our scientific discoveries and our mission to make the world safer. This talk will focus on some of the ongoing and future projects and opportunities within the ISR division that have contributed to those missions; including both space and ground based applications. Topics presented will include advanced simulation and modeling, nuclear nonproliferation, defense and space applications and detection research and development in addition to Earth and environmental strategic research.

About Dr. Shawn Tornga

Dr. Shawn R. Tornga is a senior project leader at Los Alamos National Laboratory in the space science and applications group (ISR-1). Dr. Tornga has worked on multiple gamma-ray detection and imaging programs performing instrument design, simulation, modeling, algorithm and analysis software development for both terrestrial and space based applications. Programs include the prototype Compton imager (PCI) for DOE NA-42, the stand-off radiation detection system (SORDS) for the Department of Homeland Security's (DHS) Domestic Nuclear detection Office (DNDO) and the Fast, Advanced Scintillator Compton Telescope (FACTEL) for NASA. Additionally, Dr. Tornga is also responsible for simulation, analysis, and infrastructure codes to assess on-orbit payload performance, inform instrument design and perform demonstration exercises across multiple phenomenologies including gamma-rays, X-rays, neutrons, charged particles and non-ionizing electromagnetic radiation.