Dr. Brendan Kochunas



Bio

Prof. Kochunas is an Assistant Professor in the Department of Nuclear Engineering and Radiological Sciences at the University of Michigan where he received his PhD in Nuclear Engineering in 2013. During his time as a PhD student, he initiated development of the MPACT code that became the main deterministic neutronics tool within the CASL (Consortium for Advanced Simulation of Light Water Reactors) project and subsequently within VERA (Virtual Environment for Reactor Applications). MPACT was not only born out of his PhD research but has also become a central research tool in the work of more than 17 other PhD students in the NERS department. At Michigan he now leads the Nuclear Reactor Analysis and Methods (NuRAM) Group which continues to develop the MPACT code. More recently Prof. Kochunas has been performing work to develop technology for autonomous nuclear reactors, and nuclear integrated energy systems. His research interests include numerical methods for computational reactor physics, nuclear reactor design, reactor control, and digital twins. Prof. Kochunas also has degrees in nuclear engineering from the University of California Berkeley (MSE, 2008) and Purdue University (BSNE 2006).

Years beyond PhD

Nine Years

Research area Computational Reactor Physics

School of employment University of Michigan

Educational background (field of degrees)

Ph.D. University of Michigan, Nuclear Engineering, 2013M.S. University of California Berkeley, Nuclear Engineering, 2008B.S. Purdue University, Nuclear Engineering and Technology, 2006