

Science & Society Distinguished Public Talks

Co-sponsored by the UNM Chapter of Sigma Xi, The Scientific Research Honor Society, the Albuquerque Section of the Institute of Electrical & Electronic Engineers (IEEE) and its Life Members Affinity Group, Sigma Xi (the Scientific Research Honor Society), the UNM Department of Physics & Astronomy and Interdisciplinary Science



Presents

Nuclear Waste: The Good, the Bad, and the Ugly By **Christopher Perfetti**



February 20, 2025 5:30 PM

UNM Dept. of Physics, Astronomy, & Interdisciplinary Research, 210 Yale Blvd NE Rm 1100

And ZOOM

<https://unm.zoom.us/j/97093189316>

Password SigmaXi

**Free and open to the public
Meet & Greet with refreshments at 5 PM**

Dr. Christopher Perfetti is an Associate Professor in the Nuclear Engineering Department at the University of New Mexico. Prior to his appointment at UNM, Chris was an R&D scientist in the Reactor and Nuclear Systems Division at Oak Ridge National Laboratory, where he developed the CE TSUNAMI-3D sensitivity analysis code and served as the Sensitivity and Uncertainty Analysis Method Team Lead for the SCALE Code Package.

Chris received B.S. and M.S. degrees in nuclear and radiological engineering from the University of Florida in 2007 and 2008, respectively, and received his Ph.D. in nuclear engineering from the University of Michigan in 2012. His dissertation work developed algorithms for adjoint-weighted sensitivity analysis using continuous-energy Monte Carlo methods that improved computational efficiency and reduced memory requirements.

Abstract: This seminar will discuss what is either nuclear energy's greatest weakness or greatest strength: nuclear waste. Dr. Perfetti will define nuclear waste, explore how much of it we must dispose of, and review several options for disposing of nuclear waste, ranging from the ideal to the plausible to the absurd.