

Biographical Summary

In August of 2016, Dr. McBride joined the faculty of the University of Michigan (UM) as an associate professor in Nuclear Engineering & Radiological Sciences. His primary research interests are in pulsed-power-driven HEDP, nuclear fusion, radiation generation, pulsed-power technology, plasma diagnostics, and the dynamics of magnetically driven, cylindrically imploding systems. This research is conducted using the Michigan Accelerator for Inductive Z-pinch Experiments (MAIZE), which is a 1-MA LTD residing in the Plasma, Pulsed-Power, and Microwave Laboratory at UM. Prior to joining UM, Professor McBride was with Sandia National Laboratories in Albuquerque, NM (from November 2008 to August 2016), where he held appointments as both a staff physicist and a department manager. At Sandia, Dr. McBride conducted research in nuclear fusion, radiation generation, and high-pressure material properties experiments using the Z pulsed-power facility. Most recently, Dr. McBride's research has been focused on both theoretical and experimental studies of an exciting new concept called Magnetized Liner Inertial Fusion (MagLIF). MagLIF is one of the United States' three mainline approaches to studying controlled inertial confinement fusion (ICF) in the laboratory. Dr. McBride received his PhD from Cornell University in 2009, where he conducted HEDP research using the 1-MA COBRA pulsed-power facility.