

Mark Lumsden

Address: Oak Ridge National Laboratory
Building 8600 Room C-483, P.O. Box 2008
Oak Ridge, TN, 37830

Phone: (865) 241-0090
email: lumsdenmd@ornl.gov

Education

- Ph.D. in Physics, McMaster University, Canada, 1999
- B.Sc. in Physics, St. Francis Xavier University, Canada, 1993

Professional Experience

- Leader, Time-of-Flight Spectroscopy Group, ORNL (2011-present)
- Research Staff Scientist (Instrument Scientist – HB-3 Triple-Axis Spectrometer), ORNL (2001-2011)
- Eugene P. Wigner Fellow, ORNL (1999-2001)

Research Interests

My research interests are mostly in the area of condensed matter physics with focus on magnetism and superconductivity. Specific problems of interest include Fe-based superconductivity, multiferroicity, magnetism in 5d electron materials and quantum magnetism. Expertise in both inelastic and elastic neutron scattering using instruments at continuous and pulsed sources. I also have interest in software development in support of neutron scattering experiments and I am a co-author of the SPICE data acquisition system which is used to operate multiple instruments at the High-Flux Isotope Reactor. Co-author of >70 peer-reviewed articles.

Professional Activities and Honors

- Secretary, SNS-HFIR User Group (2005-2007)
- Member of the SEQUOIA Instrument Development Team (2006-present)
- Led triple-axis experiments as part of the National School on Neutron and X-ray Scattering (2008-2011)
- Gordon Battelle Award for Scientific Research (principal investigator) (2011)
- ORNL award for scientific research and Director's award for team accomplishment (2011)
- Eugene P. Wigner Fellowship (1999-2001)
- Member, Neutron Scattering Society of America, American Physical Society, and Canadian Institute for Neutron Scattering