

Program for the LANSCE Futures Spring Workshop 2021: **Nuclear Science**

May 10th, Monday 2021

Open WebEx Meeting (Meeting number: 133 502 0373, Password: lansce2021)

<https://lanl-us.webex.com/lanl-us/j.php?MTID=m187f10a2a91a1910a2debe1dc1048c49>

Program	Time	Speaker	Title
8:10 – 8:30	20 min		WebEx logging in/speaker audio-slide test
Session 1: Nuclear Science for Applications (8:30 – 10:25) Chair: Shea Mosby			
8:30 – 8:35	5 min	Shea Mosby (LANL)	Overview of the LANSCE Futures Workshops
8:35 - 8:55	20 min	Mark Chadwick (LANL)	LANSCE for Weapons Physics
8:55 – 9:10	15 min	Jennifer Jo Ressler (LLNL)	Nuclear Data Needs from Lawrence Livermore National Lab's Applications
9:10 - 9:25	15 min	Michael Zerkle (Naval Nuclear Laboratory)	Nuclear Data Needs from Nuclear Criticality Safety Program's Perspective and Beyond
9:25 – 9:40	15 min	Tommy Cisneros (TerraPower LLC)	Nuclear Data Needs and Impacts for the Molten Chloride Fast Reactor Projects
9:40 – 9:55	15 min	Sherry Yennello (Texas A&M)	Center for Excellence in Nuclear Training and University-based Research (CENTAUR) Effort for Applications
9:55 -10:10	15 min	Marian Jandel (UMass Lowell)	Nuclear Data Effort at University of Massachusetts at Lowell for Nuclear Science and Applications
10:10 - 10:25	15min	Vlad Sobes (UTK)	Experimental capabilities at the University of Tennessee at Knoxville for Nuclear Data and Applications
10:25 - 10:35	10 min		Break
Session 2: LANSCE Futures for Isotope Program (10:35 - 11:35) Chair: Hye Young Lee			
10:35 - 10:55	20 min	Eva Birnbaum (LANL)	IPF Future @ LANSCE
10:55 - 11:10	15 min	Greg Severin (MSU)	Isotope Harvesting @ FRIB
11:10 - 11:25	15 min	Etienne Vermeulen (LANL)	Radionuclide Mass Separator @ LANSCE
11:25 – 11:35	10 min	Lee Bernstein (UC-Berkeley/LBNL)	Secondary Particle Spectral Measurements for Isotope Production and Space Exploration
11:35 – 11:45	10 min		Break
Session 3: LANSCE Futures for Science and Applications (11:45 - 13:10) Chair: Hye Young Lee			
11:45 – 12:00	15 min	Keegan Kelly (LANL)	Neutron Scattering and Future Experimental Capabilities @ WNR
12:00 - 12:10	10 min	Mark Paris (LANL)	Light-element Multichannel R-matrix Evaluation Developments and Needs

12:10-12:25	15 min	Jack Winkelbauer (LANL)	Fission Production Yield and Future Experimental Capabilities @ Lujan
12:25 – 12:35	10 min	Mike Snow (Indiana U.)	Flight Path 12 Options for eV Neutron Physics
12:35 – 12:40	15 min	Richard Van de Water (LANL)	New capability of neutrino beam @ LANSCE
12:40 – 12:55	15 min	Rene Reifarh (Goethe U., Germany)	A Neutron Target and Storage Ring for Nuclear Astrophysics
12:55 - 13:10	15 min	Ito Takeyasu (LANL)	UCN Future @ LANSCE

May 11th, Tuesday 2021
Classified Meeting in the NSSB Auditorium

Program	Time	Speaker	Title
8:10 – 8:30	20 min		Greeting
Session 1: Nuclear Science Perspectives (8:30 – 10:15) Chair: Shea Mosby			
8:30-8:35	5 min	Shea Mosby (P-3)	Workshop Overview
8:35 - 8:55	20 min	Grant Bazan (XTD-DO)	(U) 2018 PCF L1 and implications for current measurements
8:55 – 9:15	20 min	John Gibbs (XTD-PRI)	(U) Nuclear science needs from a PRI perspective
9:15 - 9:35	20 min	Stephanie Frankle (XTD-IDA)	(U) Nuclear science needs from an IDA perspective
9:35 – 9:55	20 min	Michelle Mosby (XTD-NTA)	(U) Nuclear science needs from a DA perspective
9:55 – 10:15	20 min	August Keksis (C-NR)	(U) Radiochemistry perspectives on potential measurements
10:15 – 10:25	10 min		Break
Session 2: Nuclear Science Possibilities (10:25 – 11:55) Chair: Shea Mosby			
10:25 - 10:40	15 min	Paul Koehler (P-3)	(U) Neutron transmission for radionuclide measurements
10:40 - 10:55	15 min	Sean Kuvin (P-3)	(U) Fast neutron reactions on radionuclides
10:55 - 11:10	15 min	Christopher Fryer (CCS-2)	(U) ASC advances
11:10 - 11:25	15 min	Shea Mosby (P-3)	(U) Potential for neutron reaction studies on short-lived nuclei
11:25 - 11:40	15 min	Christopher Prokop (P-3)	(U) Applied nuclear science – near term
11:40 - 11:55	15 min	John Goett (p-2)	(U) Applied nuclear science – long term