Accelerator Science, Applications and Broader Impacts

Program for 15 November 2022

Longer talks are 20 minutes. Shorter talks are < 5 minutes. There will be time at the end of each session for discussion. All times are Central Standard Time.

Location: APS Conference Center (Bldg. 402), E1200

Join Zoom Meeting:
https://msu.zoom.us/j/98185840505
Meeting ID: 981 8584 0505
Passcode: LRP

13:30-15:00 Session 1

13:30 Accelerator Science at ANL ATLAS – Clay Dickerson

13:50 Accelerator Science at FRIB – Peter Ostroumov

14:10 Short Talks:

Status of Cyclotron Institute at Texas A&M University and planned facility upgrades – Brian Roeder

AI-ML for Accelerator Operations and Radioactive Beam Production – Brahim Mustapha

AI/ML for heavy-ion accelerators – Y. Hao

Infrastructure Modernization to Support AI – David Novak

14:30 Radiation Detection And Imaging In The Intersection Of Nuclear Science And Engineering, Security, Medicine, And Society – Kai Vetter

14:50 Short talks

Medical Imaging – Josh Cates (Kai Vetter for Josh)

Semiconductor Detectors – Alexey Drobizhev

Scintillation Detectors and Precision Timing – Weronika Wolszczak

Contextual Sensing In The Context Of Messaging, Outreach, And Education – Ali HanksEnabling

Surrogate Reactions for Stockpile Stewardship - Andrew Ratkiewicz

Heavy-ion diagnostics – Steve Lidia

Time for Discussion

15:20-17:20 Session 2

15:20 Short talks:

SRF activities at RadiaBeam – Sergey Kutsaev

Future HOM dampening: EIC & beyond – Paul Carriere

15:30 Applications of Accelerator Science – Peter Bender

15:50 Single Event Upset Studies with Accelerators – Steve Lidia

16:10 Short Talks:

ISNAP accelerator physics applications & techniques – Daniel Robertson

Materials irradiation Studies at ATLAS – Jerry Nolen

Development of domestic industrial partners for NP accelerators – Michael Kelly

Industrial Perspectives on NP Accelerators – John Rathke

Ion Source Technologies – Jake McLain

ECR ion source developments – G. Machicoane

MARS: A Next Generation ECR Ion Source – Damon Todd

Maintaining Clean Systems for High Performance Accelerators – Ben Blomberg

ASET program – P. Ostroumov

MSU cryogenic initiatives – P. Knudsen

SRF Developments – Sang-Hoon Kim

Niobium-Tin As A Transformational Technique For Next Gen NP Machines – Troy Petersen

Circular Mode Optics for Colliders – Brahim Mustapha

Liquid Metal Charge Stripper T. Kanemura

Detectors for rare isotope beams – Marco Cortesi

Superconducting Magnets – Y. Choi

Time for Discussion