

CENTAUR-JINPA Neutron Detector Workshop 2021

Zoom Link:

<https://tamu.zoom.us/j/99187910769?pwd=TS9SdjdJN3NjQ0xXZ3pvSTdYc0FaUT09>

All times in EDT.

Wednesday, September 29

Session 1. *Chair: Lee Sobotka, Washington University in St Louis*

12:00-12:25 pm — *Development of the TexNeut array for basic science*, Cody Parker, Texas A&M University

12:25-12:50 pm — *Neutron time-of-flight detectors for decay studies: VANDLE and NEXT*, Robert Grzywacz, The University of Tennessee, Knoxville & Oak Ridge National Laboratory

12:50-1:15 pm — *Neutron spectroscopy studies with CATRiNA*, Sergio Almaraz Calderon, Florida State University

—Break—

Session 2. *Chair: Michael Febraro, Oak Ridge National Laboratory*

1:35-1:50 pm — *ODeSA: Recent Results and Future Directions*, Rebecca Toomey, Rutgers University & Oak Ridge National Laboratory

1:50-2:05 pm — *The Development of the Texas Neutron Detector – TexNeut*, Dustin Scriven, Texas A&M University

2:05-2:20 pm — *Design and characterization of NEXT detector prototypes*, Joe Heideman, The University of Tennessee, Knoxville

2:20-2:35 pm — *RESONEUT: Compact neutron array for (d,n) reactions in inverse kinematics*, Eli Temanson, Florida State University

2:35-2:50 pm — *Multi-channel Integrated Circuits for the Detection and Measurement of Ionizing Radiation*, Bryan Orabutt, Washington University of St Louis

—Break—

Session 3. *Chair: Lauren McIntosh, Texas A&M University*

3:10-3:35 pm — *Beta-delayed neutron emission studied with ^3He arrays*, Krzysztof Rykaczewski, Oak Ridge National Laboratory

3:35-4:00 pm — *DAEMON and DESCANT: An overview of the current and future neutron detectors for the GRIFFIN decay station at TRIUMF*, Allison Radich, TRIUMF

4:00—Poster Session & Discussion

Thursday, September 30

Session 4. *Chair: Miguel Madurga Flores, University of Tennessee at Knoxville*

12:00-12:25 pm — *Understanding neutron scattering in plastic scintillators and the future of MoNA*, Anthony Kuchera, Davidson College

12:25-12:50 pm — *Prompt Fission Neutron Detection and Beyond at LANSCE with the Chi-Nu Experiment*, Keegan Kelly, Los Alamos National Laboratory

12:50-1:15 pm — *Total Absorption Spectroscopy and Neutrons: Detecting Neutrons with Sodium Iodide*, Bertis Rasco, Oak Ridge National Laboratory

—Break—

Session 5. *Chair: Sergio Almaraz Calderon, Florida State University*

1:35-2:00 pm — *VANDLE: one decade of neutron spectroscopy*, Miguel Madurga Flores, The University of Tennessee at Knoxville

2:00 pm-2:15 pm — *Modular Next Generation Fast Neutron Detector for Portal Monitoring*, Eric Aboud, Texas A&M University

2:15-2:30 pm — *First measurements with NEXT*, Shree Neupane, The University of Tennessee at Knoxville

2:30-2:45 pm — *Spectrum unfolding of the CATRiNA detectors*, Ashton Morelock, Florida State University

2:45-3:00 pm — *A highlight of the neutron TOF spectroscopy at ISOLDE decay station*, Zhengyu Xu, The University of Tennessee at Knoxville

—Break—

Session 6. *Chair: Robert Grzywacz, The University of Tennessee at Knoxville*

3:20-3:35 pm — *Temperature dependence of triplet diffusion in solid-state scintillators*, Dan Mulrow, Washington University of St. Louis

3:35-4:00 pm — *Measuring beta-delayed neutron emission via recoil-ion spectroscopy with the BPT*, Gemma Wilson, Louisiana State University

4:00-4:25 pm — *Development of organic scintillators for fast and thermal neutron detection*, Natalia Zaitseva, Lawrence Livermore National Laboratory

4:25 pm — *Poster Session & Discussion*

Friday, October 1

Session 7. Chair: Z. Xu, The University of Tennessee at Knoxville

12:00-12:25 pm— *Heterogeneous Composite Neutron Detectors: Recent Developments and Applications*, Igor Jovanovic, University of Michigan

12:25-12:50 pm — *Inferring the Absolute Energy Spectra from Neutron Time-of-Flight Spectrometers Operating in Current Mode*, Chad Forrest, University of Rochester

12:50-1:15 pm — *HeBGB: the Ohio University Neutron Long Counter*, Zach Meisel, Ohio University

—Break—

Session 8. Chair: Cody Parker, Texas A&M University

1:35-2:00 pm — *Neutron Sensing Instrumentation Development*, Jason Hayward, The University of Tennessee at Knoxville

2:00-2:25 pm — *Fast Neutron Spectroscopy with C7LYC: Experiments and Simulations*, Partha Chowdhury, University of Massachusetts-Lowell

2:25-2:50 pm — *Neutron source and detection capabilities at Ohio University*, Carl Brune, Ohio University

2:50-3:15 pm — *3D printing of scintillators for neutron detection*, Michael Febbraro, Oak Ridge National Laboratory

3:15 pm—Poster Session & Discussion