

# **Workshop for Applied Nuclear Data Activities (WANDA) 2025**

## **Report of Contributions**

Contribution ID: 2

Type: **not specified**

## Welcome

*Monday, 10 February 2025 08:00 (5 minutes)*

**Presenters:** Dr O'BRIEN, Ellen (Los Alamos National Laboratory); BROWN, Jesse (Oak Ridge National Laboratory)

**Session Classification:** Session I

Contribution ID: 3

Type: **not specified**

## **NDWG Welcome and Overview**

*Monday, 10 February 2025 08:05 (5 minutes)*

**Presenters:** RESSLER, Jennifer Jo; BREDEWEG, Todd (LANL)

**Session Classification:** Session I

Contribution ID: 4

Type: **not specified**

## **Early Career Award: An Innovative (n,xn) Measurement Capability for Fusion Reactors, Fast Reactors, Radiochemical Diagnostics, and Astrophysics**

*Thursday, 13 February 2025 08:00 (7 minutes)*

**Presenter:** KELLY, Keegan (Los Alamos National Laboratory)

**Session Classification:** Session VI

Contribution ID: 5

Type: **not specified**

## **Scoping Study for Nuclear Reaction Cross sectionson Short-Lived FP (NNSA)**

*Thursday, 13 February 2025 08:07 (14 minutes)*

**Presenter:** RATKIEWICZ, Andrew (Lawrence Livermore National Laboratory)

**Session Classification:** Session VI

Contribution ID: 6

Type: **not specified**

## **Reaction Cross Sections, Secondary Gamma-Ray Yields, and Measured Neutron Spectra for Alpha-Induced Reactions on Light Nuclei**

*Thursday, 13 February 2025 08:21 (14 minutes)*

**Presenters:** LEE, Hye Young (LANL); MCCONCHIE, Seth (ORNL)

**Session Classification:** Session VI

Contribution ID: 7

Type: **not specified**

## **Gamma Production Cross Sections for Active Neutron Interrogation with GENESIS**

*Thursday, 13 February 2025 08:35 (14 minutes)*

**Presenter:** GOLDBLUM, Bethany (UCB)

**Session Classification:** Session VI

Contribution ID: 8

Type: **not specified**

## **New measurements of spontaneous fission properties of Pu isotopes**

*Thursday, 13 February 2025 08:49 (14 minutes)*

**Presenter:** DEVLIN, Matthew (LANL)

**Session Classification:** Session VI



Contribution ID: 9

Type: **not specified**

## **Designing Nuclear-data Measurements that Resolve Discrepancies in Existing Data**

*Thursday, 13 February 2025 09:03 (14 minutes)*

**Presenter:** NEUDECKER, Denise (Los Alamos National Laboratory)

**Session Classification:** Session VI

Contribution ID: 10

Type: **not specified**

## **Modern Structure-based Nuclear Data Evaluations for Basic Science, Nuclear Safety & Security**

*Thursday, 13 February 2025 09:17 (14 minutes)*

**Presenter:** PARIS, Mark (Los Alamos National Laboratory)

**Session Classification:** Session VI

Contribution ID: 11

Type: **not specified**

## **Determination of $\beta$ -energy spectral shapes in fission products affecting reactor decay heat, anti-neutrino flux, and addressing potential physics beyond the standard model**

*Thursday, 13 February 2025 09:31 (14 minutes)*

**Presenter:** RASCO, Bertis (Oak Ridge National Laboratory)

**Session Classification:** Session VI

Contribution ID: 12

Type: **not specified**

## **Accelerated Decay Data Evaluation and Development of an Adopted Decay Data Library**

*Thursday, 13 February 2025 09:45 (14 minutes)*

**Presenter:** MCCUTCHAN, Libby (BNL/NNDC)

**Session Classification:** Session VI

Contribution ID: 13

Type: **not specified**

## **Impact of Nuclear Data on Advanced Nuclear Energy Systems Safety and Operation**

*Thursday, 13 February 2025 09:59 (14 minutes)*

**Presenter:** PROCOP, Germina (ORNL)

**Session Classification:** Session VI

Contribution ID: 14

Type: **not specified**

## **Benchmarking and validating cosmogenic activation models**

*Thursday, 13 February 2025 10:13 (14 minutes)*

**Presenters:** HELLINGER, Aaron (PNNL); SALDANHA, Richard (Pacific Northwest National Laboratory)

**Session Classification:** Session VI

Contribution ID: 15

Type: **not specified**

## **Bayesian Framework for Mining of Evaluated Nuclear Mass Data**

*Thursday, 13 February 2025 10:43 (14 minutes)*

**Presenter:** GODBEY, Kyle

**Session Classification:** Session VI

Contribution ID: 16

Type: **not specified**

## **Development of Benchmark Measurements for Capture Gamma Cascades**

*Thursday, 13 February 2025 10:57 (14 minutes)*

**Presenters:** MARKER, Ian (RPI); DANON, Yaron (RPI)

**Session Classification:** Session VI



Contribution ID: 17

Type: **not specified**

## **The Berkeley Atlas: A database of absolute cross sections for inelastic, gamma-ray production with 14 MeV neutrons**

*Thursday, 13 February 2025 11:11 (14 minutes)*

**Presenters:** AYLLON UNZUETA, Mauricio (University of California Berkeley); PEPLOWSKI, Patrick (Johns Hopkins University Applied Physics Laboratory)

**Session Classification:** Session VI

Contribution ID: 18

Type: **not specified**

## **Evaluation of Energy Dependent Fission Product Yields**

*Thursday, 13 February 2025 11:25 (7 minutes)*

**Presenter:** KAWANO, Toshihiko (LANL)

**Session Classification:** Session VI

Contribution ID: 19

Type: **not specified**

## **Fission products with NuCARIBU**

*Thursday, 13 February 2025 11:32 (7 minutes)*

**Presenter:** SAVARD, Guy (ANL)

**Session Classification:** Session VI

Contribution ID: 20

Type: **not specified**

## **Nuclear Structure Evaluators Traineeship at Lawrence Livermore National Laboratory**

*Thursday, 13 February 2025 11:39 (7 minutes)*

**Presenters:** RAMIREZ, Anthony (LLNL); MCCUTCHAN, Libby (BNL/NNDC)

**Session Classification:** Session VI

Contribution ID: 21

Type: **not specified**

## Quasi-continuum Nuclear Data Evaluator Training

*Thursday, 13 February 2025 11:46 (7 minutes)*

**Presenter:** WIEDEKING, Mathis (iThemba LABS and University of the Witwatersrand)

**Session Classification:** Session VI

Contribution ID: 22

Type: **not specified**

## ND Summer School

*Thursday, 13 February 2025 11:53 (7 minutes)*

**Presenter:** PIGNI, Marco (ORNL)

**Session Classification:** Session VI

Contribution ID: 23

Type: **not specified**

## **Nuclear Data and Deterrence Session Summary**

*Thursday, 13 February 2025 13:00 (20 minutes)*

**Presenters:** COUTURE, Aaron (Los Alamos National Laboratory); RESSLER, Jennifer Jo; BRE-DEWEG, Todd (LANL)

**Session Classification:** Session Summaries

Contribution ID: 24

Type: **not specified**

## Fusion Session Summary

*Thursday, 13 February 2025 13:20 (20 minutes)*

**Presenters:** Prof. BERNSTEIN, Lee (University of California - Berkeley/LBNL); BERNSTEIN, Lee; LOUGHLIN, Michael (ORNL)

**Session Classification:** Session Summaries



Contribution ID: 25

Type: **not specified**

## **HALEU and Novel Moderators Session Summary**

*Thursday, 13 February 2025 13:40 (20 minutes)*

**Presenters:** ORTENSI, Javier (Idaho National Laboratory); CUTLER, Theresa (Los Alamos National Laboratory)

**Session Classification:** Session Summaries

Contribution ID: 26

Type: **not specified**

## **Data Preservation and Data Workflows Session Summary**

*Thursday, 13 February 2025 14:00 (40 minutes)*

**Presenters:** DASKALAKIS, Adam (Naval Nuclear Laboratory); BROWN, David (BNL/NNDC)

**Session Classification:** Session Summaries

Contribution ID: 27

Type: **not specified**

## Closeout

*Thursday, 13 February 2025 14:40 (20 minutes)*

**Presenters:** Dr O'BRIEN, Ellen (Los Alamos National Laboratory); BROWN, Jesse (Oak Ridge National Laboratory)

**Session Classification:** Session Summaries

Contribution ID: 32

Type: **not specified**

## WANDA

*Monday, 10 February 2025 08:10 (20 minutes)*

**Presenters:** HORTON, Linda (Department of Energy); STEPHENSON, Sharon (Department of Energy)

**Session Classification:** Session I

Contribution ID: 33

Type: **not specified**

## NDIAWG

*Monday, 10 February 2025 08:30 (20 minutes)*

**Presenter:** JANKOWSKI, Keith (DOE Office of Science, Nuclear Physics)

**Session Classification:** Session I

Contribution ID: **34**

Type: **not specified**

## **DOE-CDO**

*Monday, 10 February 2025 08:50 (20 minutes)*

**Presenter:** KING, Robert (Department of Energy)

**Session Classification:** Session I

Contribution ID: 35

Type: **not specified**

## NA-22

*Monday, 10 February 2025 09:10 (20 minutes)*

**Presenter:** ANTONIO, Nick (NNSA)

**Session Classification:** Session I

Contribution ID: **36**

Type: **not specified**

## **DOE-IP**

*Monday, 10 February 2025 09:30 (15 minutes)*

**Presenter:** BALKIN, Ethan (DOE)

**Session Classification:** Session I



Contribution ID: 39

Type: **not specified**

## **Bridging gaps in Nuclear data needs for optimized deployment of KP-FHR reactors.**

*Tuesday, 11 February 2025 14:00 (20 minutes)*

**Presenters:** CAMPBELL, Chris (Kairos); SATVAT, Nader (Kairos)

**Session Classification:** Session IV

Contribution ID: 40

Type: **not specified**

## **Westinghouse Nuclear Data Needs for Advanced Reactor Products**

*Tuesday, 11 February 2025 14:20 (20 minutes)*

**Presenter:** MEANS, Keith (Westinghouse)

**Session Classification:** Session IV

Contribution ID: 43

Type: **not specified**

## **Nuclear Criticality Safety Program Support for HALEU and Other DOE Programs**

*Tuesday, 11 February 2025 14:50 (15 minutes)*

**Presenter:** BOWEN, Douglas (Oak Ridge National Laboratory)

**Session Classification:** Session IV

Contribution ID: 44

Type: **not specified**

## **The DEIMOS Testbed for HALEU Reactor Demonstrations and HALEU Fuel Procurement**

*Tuesday, 11 February 2025 15:05 (15 minutes)*

**Presenter:** THOMPSON, Nicholas (Los Alamos National Laboratory)

**Session Classification:** Session IV

Contribution ID: 45

Type: **not specified**

## **Applied Nuclear Data Supporting HALEU Fuel Transport: DNCSH Critical Benchmark Experiments at SPRF/CX**

*Tuesday, 11 February 2025 15:20 (15 minutes)*

**Presenter:** PULIO, Ramon (Sandia National Laboratories)

**Session Classification:** Session IV

Contribution ID: 46

Type: **not specified**

## **Bridging Thermal Scattering Law Data Gaps for Novel Moderators in Advanced Reactors**

*Tuesday, 11 February 2025 15:45 (15 minutes)*

**Presenter:** AL-QASIR, Iyad (Oak Ridge National Laboratory)

**Session Classification:** Session IV

Contribution ID: 47

Type: **not specified**

## **Update on ENDF/B-VIII.1 TSLs for Moderator and Fuel Materials**

*Tuesday, 11 February 2025 16:00 (15 minutes)*

**Presenter:** ZERKLE, Michael (Naval Nuclear Laboratory)

**Session Classification:** Session IV

Contribution ID: 48

Type: **not specified**

## **Data Needs for Nuclear Material Accounting and Safeguards in the HALEU Fuel Cycle**

*Tuesday, 11 February 2025 16:25 (15 minutes)*

**Presenter:** CROCE, Mark (Los Alamos National Laboratory)

**Session Classification:** Session IV



Contribution ID: 49

Type: **not specified**

## **Multi-Physics Code Prediction of Nuclear Material Quantities for Advanced Reactor Safeguards**

*Tuesday, 11 February 2025 16:40 (15 minutes)*

**Presenter:** HOGUE, Karen (Oak Ridge National Laboratory)

**Session Classification:** Session IV

Contribution ID: 52

Type: **not specified**

## Introduction

*Tuesday, 11 February 2025 13:30 (10 minutes)*

**Presenters:** ORTENSI, Javier (Idaho National Laboratory); CUTLER, Theresa (Los Alamos National Laboratory)

**Session Classification:** Session IV

Contribution ID: 53

Type: **not specified**

## **HALEU Transportation and Fuel Cycle Licensing and the DNCSH Project**

*Tuesday, 11 February 2025 13:40 (20 minutes)*

**Presenters:** BARTO, Andrew (Nuclear Regulatory Commission); ALGAMA, Don (Department of Energy Office of Science, Nuclear Energy)

**Session Classification:** Session IV

Contribution ID: 54

Type: **not specified**

## Introduction

*Monday, 10 February 2025 13:00 (10 minutes)*

**Presenter:** RESSLER, Jennifer Jo

**Session Classification:** Session II

Contribution ID: 55

Type: **not specified**

## Determining Needs

*Monday, 10 February 2025 13:10 (20 minutes)*

**Presenters:** DREYFUSS, Ali (Lawrence Livermore National Laboratory); CASPERSON, Robert (LLNL)

**Session Classification:** Session II

Contribution ID: 56

Type: **not specified**

## Defining Experiments

*Monday, 10 February 2025 13:30 (20 minutes)*

**Presenter:** NEUDECKER, Denise (Los Alamos National Laboratory)

**Session Classification:** Session II

Contribution ID: 57

Type: **not specified**

## **Opportunities for AI/ML**

*Monday, 10 February 2025 13:50 (20 minutes)*

**Presenter:** VANDER WIEL, Scott (Los Alamos National Laboratory)

**Session Classification:** Session II

Contribution ID: 58

Type: **not specified**

## Capabilities with HPC, GPU, and QIS

*Monday, 10 February 2025 14:10 (20 minutes)*

**Presenter:** KRAVVARIS, Konstantinos (Lawrence Livermore National Laboratory)

**Session Classification:** Session II



Contribution ID: **60**

Type: **not specified**

## **Nuclear Data Experiments**

*Monday, 10 February 2025 15:15 (20 minutes)*

**Presenter:** COUTURE, Aaron (Los Alamos National Laboratory)

**Session Classification:** Session II

Contribution ID: **61**

Type: **not specified**

## **High Energy Flash Radiography and Nuclear Data**

*Monday, 10 February 2025 15:35 (20 minutes)*

**Presenter:** AUFDERHEIDE, Maurice (Lawrence Livermore National Laboratory)

**Session Classification:** Session II

Contribution ID: 62

Type: **not specified**

## **Detection Capabilities for Nuclear Data**

*Monday, 10 February 2025 15:55 (20 minutes)*

**Presenter:** KELLY, Keegan (Los Alamos National Laboratory)

**Session Classification:** Session II

Contribution ID: 63

Type: **not specified**

## Integrated Experiment Diagnostics

*Monday, 10 February 2025 16:15 (20 minutes)*

**Presenter:** LABB, Samantha (Lawrence Livermore National Laboratory)

**Session Classification:** Session II

Contribution ID: 65

Type: **not specified**

## Introduction

*Wednesday, 12 February 2025 08:00 (15 minutes)*

**Presenters:** DASKALAKIS, Adam (Naval Nuclear Laboratory); BROWN, David (BNL/NNDC)

**Session Classification:** Session V

Contribution ID: **66**

Type: **not specified**

## **Keynote**

*Wednesday, 12 February 2025 08:30 (20 minutes)*

**Presenter:** COOKE, Michael (DOE)

**Session Classification:** Session V

Contribution ID: 67

Type: **not specified**

## **Digitising historical atmospheric electricity data with citizen science**

*Wednesday, 12 February 2025 08:50 (15 minutes)*

**Presenter:** NICOLL, Keri (University of Reading (UK))

**Session Classification:** Session V

Contribution ID: **68**

Type: **not specified**

## **NNDC and other PuRe Data Resources**

*Wednesday, 12 February 2025 09:05 (15 minutes)*

**Presenter:** BROWN, David (BNL/NNDC)

**Session Classification:** Session V



Contribution ID: **69**

Type: **not specified**

## **Discussion**

*Wednesday, 12 February 2025 09:20 (30 minutes)*

**Session Classification:** Session V

Contribution ID: 70

Type: **not specified**

## **Introduction**

*Wednesday, 12 February 2025 10:10 (10 minutes)*

**Session Classification:** Session V

Contribution ID: 71

Type: **not specified**

## **Experimental nuclear data archaeology**

*Wednesday, 12 February 2025 10:20 (15 minutes)*

**Presenters:** OTUKA, Naohiko (IAEA); DIMITRIOU, Vivian (IAEA)

**Session Classification:** Session V

Contribution ID: 72

Type: **not specified**

## **Legacy data for an automatically readable, comprehensive, and curated experimental reaction database**

*Wednesday, 12 February 2025 10:35 (15 minutes)*

**Presenter:** PRITYCHENKO, Boris (BNL)

**Session Classification:** Session V

Contribution ID: 73

Type: **not specified**

## Talk 3

*Wednesday, 12 February 2025 10:50 (15 minutes)*

**Presenter:** NEUDECKER, Denise (Los Alamos National Laboratory)

**Session Classification:** Session V

Contribution ID: 74

Type: **not specified**

## Discussion

*Wednesday, 12 February 2025 11:20 (40 minutes)*

**Session Classification:** Session V

Contribution ID: 75

Type: **not specified**

## **A Framework for a Modern USNDP**

*Wednesday, 12 February 2025 13:05 (20 minutes)*

**Presenter:** JANKOWSKI, Keith (DOE Office of Science, Nuclear Physics)

**Session Classification:** Session V

Contribution ID: 76

Type: **not specified**

## **Processing trails: beyond n-transport only**

*Wednesday, 12 February 2025 13:25 (15 minutes)*

**Presenter:** SUBLET, Jean-Christophe (UKEA)

**Session Classification:** Session V



Contribution ID: 77

Type: **not specified**

## Talk 2

*Wednesday, 12 February 2025 13:40 (15 minutes)*

**Presenter:** FLEMING, Michael (OECD Nuclear Energy Agency)

**Session Classification:** Session V

Contribution ID: 79

Type: **not specified**

## Updating to a GNDS-based nuclear data workflow

*Wednesday, 12 February 2025 13:55 (15 minutes)*

**Presenter:** Dr MATTOON, Caleb (Lawrence Livermore National Laboratory)

**Session Classification:** Session V

Contribution ID: **80**

Type: **not specified**

## **Discussion**

*Wednesday, 12 February 2025 14:10 (40 minutes)*

**Session Classification:** Session V

Contribution ID: **81**

Type: **not specified**

# **Knowledge Management for Multi-Generational Projects**

*Wednesday, 12 February 2025 15:15 (20 minutes)*

**Presenter:** BELL, Stephen

**Session Classification:** Session V

Contribution ID: **82**

Type: **not specified**

## **Virtual VAX**

*Wednesday, 12 February 2025 15:50 (15 minutes)*

**Presenter:** BREDEWEG, Todd (LANL)

**Session Classification:** Session V

Contribution ID: 83

Type: **not specified**

## **Case study in data and knowledge preservation: experiences from a user with ALEPH archived data**

*Wednesday, 12 February 2025 16:05 (15 minutes)*

**Presenter:** CHEN, Yi (Vanderbil University)

**Session Classification:** Session V

Contribution ID: 84

Type: **not specified**

## **Towards a Standard Experimental Nuclear Data Format (SENDF)**

*Wednesday, 12 February 2025 15:35 (15 minutes)*

**Presenter:** DASKALAKIS, Adam (Naval Nuclear Laboratory)

**Session Classification:** Session V

Contribution ID: **85**

Type: **not specified**

## **Discussion**

*Wednesday, 12 February 2025 16:20 (40 minutes)*

**Session Classification:** Session V



Contribution ID: **86**

Type: **not specified**

## **DOE-NE**

*Monday, 10 February 2025 10:15 (15 minutes)*

**Presenter:** ALGAMA, Don (Department of Energy Office of Science, Nuclear Energy)

**Session Classification:** Session I

Contribution ID: 87

Type: **not specified**

## **NA-113**

*Monday, 10 February 2025 10:30 (15 minutes)*

**Presenter:** CALDWELL, Tod (NNSA)

**Session Classification:** Session I

Contribution ID: **88**

Type: **not specified**

## **NA-114**

*Monday, 10 February 2025 10:45 (15 minutes)*

**Presenter:** PELTZ, Jim (NNSA)

**Session Classification:** Session I

Contribution ID: **89**

Type: **not specified**

## **NCSP**

*Monday, 10 February 2025 11:00 (15 minutes)*

**Presenter:** BOWEN, Douglas (Oak Ridge National Laboratory)

**Session Classification:** Session I

Contribution ID: **90**

Type: **not specified**

## **NRC**

*Monday, 10 February 2025 11:15 (15 minutes)*

**Presenter:** KYRIAZIDIS, Lucas (NRC)

**Session Classification:** Session I

Contribution ID: **91**

Type: **not specified**

## **DTRA**

*Monday, 10 February 2025 11:30 (15 minutes)*

**Presenter:** INGRAHAM, Joanna (Defense Threat Reduction Agency)

**Session Classification:** Session I

Contribution ID: 92

Type: **not specified**

## **DOE-FES**

*Monday, 10 February 2025 09:45 (15 minutes)*

**Session Classification:** Session I

Contribution ID: 93

Type: **not specified**

## **SANPC Workshop Summary**

*Wednesday, 12 February 2025 08:15 (15 minutes)*

**Presenter:** GODBEY, Kyle

**Session Classification:** Session V



Contribution ID: 94

Type: **not specified**

## Talk 4

*Wednesday, 12 February 2025 11:05 (15 minutes)*

**Presenter:** PERCHER, Catherine (LLNL)

**Session Classification:** Session V

Contribution ID: 95

Type: **not specified**

## **Introduction**

*Wednesday, 12 February 2025 13:00 (5 minutes)*

**Session Classification:** Session V

Contribution ID: **96**

Type: **not specified**

## **Introduction**

*Wednesday, 12 February 2025 15:10 (5 minutes)*

**Session Classification:** Session V

Contribution ID: 97

Type: **not specified**

## **Summary of Fusion Energy Science sessions at WANDA-24**

*Tuesday, 11 February 2025 08:00 (25 minutes)*

**Presenter:** LOUGHLIN, Michael (ORNL)

**Session Classification:** Session III

Contribution ID: 98

Type: **not specified**

## **An Assessment of Existing Nuclear Data and Proposals for Future Experiments**

*Tuesday, 11 February 2025 08:25 (25 minutes)*

**Presenter:** Prof. BERNSTEIN, Lee (University of California - Berkeley/LBNL)

**Session Classification:** Session III

Contribution ID: 99

Type: **not specified**

## **Fusion technologies data needs: the missing links**

*Tuesday, 11 February 2025 08:50 (25 minutes)*

**Presenter:** SUBLET, Jean-Christophe (UKEA)

**Session Classification:** Session III

Contribution ID: **100**

Type: **not specified**

## **Fusion-Relevant Changes in the ENDF/B-VIII.1 Library**

*Tuesday, 11 February 2025 09:15 (25 minutes)*

**Presenter:** ROMANO, Paul (Argonne National Laboratory)

**Session Classification:** Session III

Contribution ID: **101**

Type: **not specified**

## **Review of Challenges to Achieving Nuclear Data Sensitivity and Uncertainty Analysis for Fusion**

*Tuesday, 11 February 2025 10:00 (25 minutes)*

**Presenter:** EBIWONJUMI, Bamidele

**Session Classification:** Session III



Contribution ID: **103**

Type: **not specified**

## **Nuclear Reactions with a Radioactive Ion Beam**

*Tuesday, 11 February 2025 10:25 (25 minutes)*

**Presenter:** FORREST, Chad (University of Rochester)

**Session Classification:** Session III

Contribution ID: **104**

Type: **not specified**

## **Disucssion**

*Tuesday, 11 February 2025 10:50 (1h 10m)*

**Session Classification:** Session III

Contribution ID: **106**

Type: **not specified**

## **Solving the Mn Puzzle**

*Thursday, 13 February 2025 12:00 (7 minutes)*

**Presenter:** JANDEL, Marian (University of Massachusetts, Lowell)

**Session Classification:** Session VI