

**Workshop for Applied Nuclear  
Data Activities (WANDA 2022)  
[FINAL]**

**Report of Contributions**

Contribution ID: 8

Type: **not specified**

## **What applications utilize these data, and what are the data needs?**

*Wednesday, 2 March 2022 12:32 (5 minutes)*

**Presenter:** MILLER (DHS/CWMD), Cameron

**Session Classification:** Session Four

Contribution ID: 9

Type: **not specified**

## **What applications utilize these data, and what are the data needs?**

*Wednesday, 2 March 2022 12:37 (15 minutes)*

**Presenter:** QUITER (LBNL), Brian

**Session Classification:** Session Four

Contribution ID: **10**

Type: **not specified**

## **Cargo Inspection Applications and Needs**

*Wednesday, 2 March 2022 12:52 (15 minutes)*

**Presenter:** BENDAHAN , Joseph

**Session Classification:** Session Four

Contribution ID: 11

Type: **not specified**

## **Cross Section Measurements of Photonuclear Reaction Pathways Towards Promising Medical Radioisotopes**

*Wednesday, 2 March 2022 13:07 (15 minutes)*

**Presenter:** AHMED (NCCU), Mohammad

**Session Classification:** Session Four

Contribution ID: 12

Type: **not specified**

## **Available Photonuclear Reaction Data and Libraries, and Evaluation Method**

*Wednesday, 2 March 2022 13:30 (20 minutes)*

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

**Session Classification:** Session Four

Contribution ID: 13

Type: **not specified**

## **Overview of Photon-induced Nuclear Reaction Research at the HIGS Facility**

*Wednesday, 2 March 2022 13:50 (15 minutes)*

**Presenter:** WU (DUKE), Ying

**Session Classification:** Session Four

Contribution ID: 14

Type: **not specified**

## **Brief Overview on Facilities for Photonuclear Reactions in Europe**

*Wednesday, 2 March 2022 14:05 (15 minutes)*

**Presenter:** PIETRALLA (TUD), Norbert

**Session Classification:** Session Four



Contribution ID: 16

Type: **not specified**

## Discussion and Summary

*Wednesday, 2 March 2022 14:20 (25 minutes)*

**Session Classification:** Session Four

Contribution ID: 17

Type: **not specified**

## **What theoretical capabilities or developments are needed for evaluations?**

*Wednesday, 2 March 2022 14:55 (20 minutes)*

**Presenter:** ORMAND (LLNL, RETIRED), Erich

**Session Classification:** Session Four

Contribution ID: **18**

Type: **not specified**

## **Processing photo-nuclear and photo-atomic data in NJOY**

*Wednesday, 2 March 2022 15:15 (15 minutes)*

**Presenter:** HAECK (LANL), Wim

**Session Classification:** Session Four

Contribution ID: 19

Type: **not specified**

## **Photonuclear and photoatomic data for transport codes using GNDS, FUDGE and GIDI+**

*Wednesday, 2 March 2022 15:30 (5 minutes)*

**Presenter:** MATTOON (LLNL), Caleb

**Session Classification:** Session Four

Contribution ID: 20

Type: **not specified**

## Photonuclear Physics Options in the MCNP6 Transport Code

*Wednesday, 2 March 2022 15:35 (10 minutes)*

**Presenter:** RISING (LANL), Michael

**Session Classification:** Session Four

Contribution ID: 21

Type: **not specified**

## Geant4 gamma transport

*Wednesday, 2 March 2022 15:45 (10 minutes)*

**Presenter:** IVANTCHENKO (CERN), Vladimir

**Session Classification:** Session Four

Contribution ID: 22

Type: **not specified**

## Discussion and Summary

*Wednesday, 2 March 2022 15:55 (35 minutes)*

**Session Classification:** Session Four

Contribution ID: 23

Type: **not specified**

## **Introduction to Nuclear Data Adjustment**

*Thursday, 3 March 2022 12:30 (15 minutes)*

**Presenter:** CASPERSON (LLNL), Robert

**Session Classification:** Session Six



Contribution ID: 24

Type: **not specified**

## Context of Adjustment & Session Overview

*Thursday, 3 March 2022 12:50 (10 minutes)*

**Presenter:** NEUDECKER (LANL), Denise

**Session Classification:** Session Six

Contribution ID: 25

Type: **not specified**

## Discussion on Adjustment

*Thursday, 3 March 2022 13:00 (5 minutes)*

**Session Classification:** Session Six

Contribution ID: 26

Type: **not specified**

## **A Review of the Nuclear Data Adjustment Activities within WPEC Sub-groups**

*Thursday, 3 March 2022 13:05 (15 minutes)*

**Presenter:** CABELLOS (UPM), Oscar

**Session Classification:** Session Six

Contribution ID: 27

Type: **not specified**

## **Nuclear Data Uncertainties and its Impact on Design Margins and Advanced Reactor Licensing**

*Thursday, 3 March 2022 13:20 (15 minutes)*

**Presenter:** DRZEWIECKI (NRC), Timothy

**Session Classification:** Session Six

Contribution ID: 28

Type: **not specified**

## **Nuclear Data Adjustment with Whisper for Criticality Safety Applications**

*Thursday, 3 March 2022 13:35 (15 minutes)*

**Presenter:** RISING (LANL), Michael

**Session Classification:** Session Six

Contribution ID: 29

Type: **not specified**

## **EUCLID Adjustment Including Multiple Integral Responses**

*Thursday, 3 March 2022 13:50 (15 minutes)*

**Presenter:** HUTCHINSON (LANL), Jesson

**Session Classification:** Session Six

Contribution ID: **30**

Type: **not specified**

## **Discussion on Use Cases**

*Thursday, 3 March 2022 14:05 (25 minutes)*

**Session Classification:** Session Six

Contribution ID: 31

Type: **not specified**

## **Stumbling Blocks, Needs and Available Resources for Creating Adjusted Libraries**

*Thursday, 3 March 2022 14:45 (10 minutes)*

**Presenter:** LEWIS (NNL), Amanda

**Session Classification:** Session Six



Contribution ID: 32

Type: **not specified**

## **Better Data for Better Models: Evolving Needs for Nuclear Data Adjustment**

*Thursday, 3 March 2022 14:55 (10 minutes)*

**Presenter:** HILL (NEA), Ian

**Session Classification:** Session Six

Contribution ID: 33

Type: **not specified**

## **Not All Integral Benchmarks are Created Equal: Words of Caution for Data Adjusters**

*Thursday, 3 March 2022 15:05 (10 minutes)*

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

**Session Classification:** Session Six

Contribution ID: 34

Type: **not specified**

## **Challenges for Data Adjustment and Bias Quantification**

*Thursday, 3 March 2022 15:15 (10 minutes)*

**Presenter:** MARSHALL (ORNL), BJ

**Session Classification:** Session Six

Contribution ID: 35

Type: **not specified**

## **Discussion on Stumbling Blocks and Needs**

*Thursday, 3 March 2022 15:35 (25 minutes)*

**Session Classification:** Session Six

Contribution ID: 36

Type: **not specified**

## **Discussion on what should go in summary document**

*Thursday, 3 March 2022 16:00 (30 minutes)*

**Session Classification:** Session Six

Contribution ID: 37

Type: **not specified**

## **Logistical introduction**

*Tuesday, 1 March 2022 12:30 (5 minutes)*

**Presenter:** VOGT (LLNL/UC DAVIS), Ramona

**Session Classification:** Session Two

Contribution ID: **38**

Type: **not specified**

## Technical introduction

*Tuesday, 1 March 2022 12:35 (20 minutes)*

**Presenter:** CUCINOTTA (UNLV), Francis

**Session Classification:** Session Two

Contribution ID: 39

Type: **not specified**

**DDFRG: Double Differential FRaGmentation models for proton and light ion production in high energy nuclear collisions: Closed-form, analytic formulas for transport codes and other applications**

*Tuesday, 1 March 2022 12:55 (25 minutes)*

**Presenter:** NORBURY (NASA), John

**Session Classification:** Session Two



Contribution ID: 40

Type: **not specified**

## **Code-based modeling**

*Tuesday, 1 March 2022 13:20 (15 minutes)*

**Presenter:** LIN (ECU), Zi-Wei

**Session Classification:** Session Two

Contribution ID: 41

Type: **not specified**

## Spacecraft-based modeling

*Tuesday, 1 March 2022 13:35 (15 minutes)*

**Presenter:** JUN (NASA/JPL), Insoo

**Session Classification:** Session Two

Contribution ID: 42

Type: **not specified**

## Modeling Panel Discussion

*Tuesday, 1 March 2022 13:50 (10 minutes)*

**Presenters:** JUN (NASA/JPL), Insoo; NORBURY (NASA, John; LIN (ECU), Zi-Wei

**Session Classification:** Session Two

Contribution ID: 43

Type: **not specified**

## **ESA/NASA/GSI database**

*Tuesday, 1 March 2022 14:00 (15 minutes)*

**Presenter:** LUONI (GSI), Francesca

**Session Classification:** Session Two

Contribution ID: 44

Type: **not specified**

## **US Nuclear Data Program databases**

*Tuesday, 1 March 2022 14:15 (10 minutes)*

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

**Session Classification:** Session Two

Contribution ID: 45

Type: **not specified**

## Databases Panel Discussion

*Tuesday, 1 March 2022 14:25 (10 minutes)*

**Presenters:** BROWN (NNNDC/BNL), David; LUONI (GSI), Francesca

**Session Classification:** Session Two

Contribution ID: 46

Type: **not specified**

## **US facilities (except RHIC)**

*Tuesday, 1 March 2022 14:50 (15 minutes)*

**Presenter:** LABEL (SSAI (NASA) AND KBR WYLE (JHU/APL)) , Ken

**Session Classification:** Session Two

Contribution ID: 47

Type: **not specified**

## European facilities

*Tuesday, 1 March 2022 15:05 (15 minutes)*

**Presenter:** PESCE (ESA), Anastasia

**Session Classification:** Session Two



Contribution ID: 48

Type: **not specified**

## **RHIC**

*Tuesday, 1 March 2022 15:20 (8 minutes)*

**Presenter:** CEBRA (UC DAVIS), Daniel

**Session Classification:** Session Two

Contribution ID: 49

Type: **not specified**

## Experimental Panel Discussion

*Tuesday, 1 March 2022 15:28 (12 minutes)*

**Presenters:** PESCE (ESA), Anastasia; CEBRA (UC DAVIS), Daneil; LABEL (KBR WYLE/SSAI), Ken; PHAIR (LBNL), Larry

**Session Classification:** Session Two

Contribution ID: 50

Type: **not specified**

## Introduction to applications

*Tuesday, 1 March 2022 15:40 (5 minutes)*

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

**Session Classification:** Session Two

Contribution ID: 51

Type: **not specified**

## Semiconductors

*Tuesday, 1 March 2022 15:45 (15 minutes)*

**Presenter:** REED (VU), Robert

**Session Classification:** Session Two

Contribution ID: 54

Type: **not specified**

## Applications Panel Discussion

*Tuesday, 1 March 2022 16:10 (15 minutes)*

**Presenters:** PHAIR (LBNL), Larry; REMMES, Nicholas (Mayo); REED (VU), Robert; GARCIA ALIA (CERN), Ruben

**Session Classification:** Session Two

Contribution ID: 55

Type: **not specified**

## Summary and Final Questions and Comments

*Tuesday, 1 March 2022 16:30 (5 minutes)*

**Session Classification:** Session Two

Contribution ID: 56

Type: **not specified**

## Welcome Introduction

*Wednesday, 2 March 2022 07:30 (10 minutes)*

**Session Classification:** Session Three

Contribution ID: 57

Type: **not specified**

## Technical Overview

*Wednesday, 2 March 2022 07:40 (20 minutes)*

**Presenter:** BAHADORI (KSU), Amir

**Session Classification:** Session Three



Contribution ID: 58

Type: **not specified**

## Secondary Neutron Production

*Wednesday, 2 March 2022 08:00 (15 minutes)*

**Presenter:** RATLIFF (HVL), Hunter

**Session Classification:** Session Three

Contribution ID: 59

Type: **not specified**

## Secondary Neutron Modeling

*Wednesday, 2 March 2022 08:15 (15 minutes)*

**Presenter:** SLABA (NASA), Tony

**Session Classification:** Session Three

Contribution ID: **60**

Type: **not specified**

## **Discussion**

*Wednesday, 2 March 2022 08:30 (20 minutes)*

**Session Classification:** Session Three

Contribution ID: 61

Type: **not specified**

## **Benchmarking the accuracy of (n,n' $\gamma$ ) cross section libraries: Application to Planetary Nuclear Spectroscopy**

*Wednesday, 2 March 2022 09:00 (15 minutes)*

**Presenter:** PEPOWSKI (JHU/APL), Patrick

**Session Classification:** Session Three

Contribution ID: 62

Type: **not specified**

## **Smart, Efficient Neutron Detection on the Moon and Mars**

*Wednesday, 2 March 2022 09:15 (15 minutes)*

**Presenter:** STILLMAN (SWRI), David

**Session Classification:** Session Three

Contribution ID: 63

Type: **not specified**

## **Needs for Neutron Data Relevant to Deep-Space Missions**

*Wednesday, 2 March 2022 09:30 (15 minutes)*

**Presenter:** ZEITLIN, Cary

**Session Classification:** Session Three

Contribution ID: **64**

Type: **not specified**

## **Discussion**

*Wednesday, 2 March 2022 10:00 (20 minutes)*

**Session Classification:** Session Three

Contribution ID: 65

Type: **not specified**

## **Electronic Effects**

*Wednesday, 2 March 2022 10:30 (15 minutes)*

**Presenter:** TBD

**Session Classification:** Session Three



Contribution ID: 67

Type: **not specified**

## Submitted Talks

*Wednesday, 2 March 2022 10:45 (15 minutes)*

**Session Classification:** Session Three

Contribution ID: **68**

Type: **not specified**

## **Discussion**

*Wednesday, 2 March 2022 11:00 (20 minutes)*

**Session Classification:** Session Three

Contribution ID: **69**

Type: **not specified**

## **Session summary**

*Wednesday, 2 March 2022 11:20 (10 minutes)*

**Session Classification:** Session Three

Contribution ID: 70

Type: **not specified**

## **WANDA 2022 Welcome**

*Monday, 28 February 2022 07:30 (15 minutes)*

WANDA opening remarks

**Presenter:** KOLOS (LNNL), Kay (LLNL)

**Session Classification:** Opening Plenary

Contribution ID: 72

Type: **not specified**

## **Safeguards Technology Development Program DOE/NNSA NA-241 Nonproliferation and Arms Control (NPAC)**

*Monday, 28 February 2022 12:45 (20 minutes)*

**Presenter:** DOUGAN (NNSA), Arden

**Session Classification:** Opening Plenary

Contribution ID: 73

Type: **not specified**

## **Senior Program Manager, Office of Nuclear Forensics (NA-83) Counter Terrorism & Counter Proliferation (NA-80)**

*Monday, 28 February 2022 11:15 (20 minutes)*

**Presenter:** ASHENFELTER (NNSA), Timothy (DOE/NNSA)

**Session Classification:** Opening Plenary

Contribution ID: 74

Type: **not specified**

## **Nuclear Data Program Manager Physics Research Division, SC-36.1**

*Monday, 28 February 2022 08:05 (20 minutes)*

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

**Session Classification:** Opening Plenary

Contribution ID: 75

Type: **not specified**

## **Nuclear Criticality Safety Program**

*Monday, 28 February 2022 12:05 (20 minutes)*

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

**Session Classification:** Opening Plenary



Contribution ID: 76

Type: **not specified**

## **DOE Office of Nuclear Energy**

*Monday, 28 February 2022 10:15 (20 minutes)*

**Presenter:** HENDERSON (DOE), David (DOE)

**Session Classification:** Opening Plenary

Contribution ID: 77

Type: **not specified**

## **Defense Nuclear Nonproliferation R&D Program Manager - Nuclear Data Objective**

*Monday, 28 February 2022 09:15 (25 minutes)*

**Presenter:** MATTERS, David (NNSA NA-221)

**Session Classification:** Opening Plenary

Contribution ID: 78

Type: **not specified**

## **Cross-Section Evaluation Working Group (CSEWG) Overview**

*Monday, 28 February 2022 15:35 (25 minutes)*

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

**Session Classification:** Opening Plenary

Contribution ID: 79

Type: **not specified**

## Department of Energy, Nuclear Physics

*Monday, 28 February 2022 07:45 (20 minutes)*

**Presenter:** HALLMAN (DOE), Tim (Department of Energy, Nuclear Physics)

**Session Classification:** Opening Plenary

Contribution ID: **80**

Type: **not specified**

## **Nuclear Data Working Group Review & Highlights**

*Monday, 28 February 2022 15:15 (20 minutes)*

**Presenter:** ROMANO, Catherine (IB3 Global Solutions)

**Session Classification:** Opening Plenary

Contribution ID: **81**

Type: **not specified**

## **SCALE Covariance Approach**

*Thursday, 3 March 2022 15:25 (10 minutes)*

**Presenter:** WIARDA (ORNL), Doro

**Session Classification:** Session Six

Contribution ID: 82

Type: **not specified**

## **National Nuclear Security Administration**

*Monday, 28 February 2022 10:55 (20 minutes)*

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

**Session Classification:** Opening Plenary

Contribution ID: 83

Type: **not specified**

## **Importance of “Stopping Power” in Assessing Material Damage**

*Thursday, 3 March 2022 07:35 (20 minutes)*

**Presenter:** GRIFFIN (SNL), Patrick

**Session Classification:** Session Five



Contribution ID: 84

Type: **not specified**

## **Electronic stopping power of ions in matter: current status of the experimental data, and the theoretical and numerical descriptions**

*Thursday, 3 March 2022 07:55 (20 minutes)*

**Presenter:** MONTANARI (UBA), Claudia

**Session Classification:** Session Five

Contribution ID: 85

Type: **not specified**

## **Heavy ion stopping power data needs for fission product mass yield measurements**

*Thursday, 3 March 2022 08:15 (15 minutes)*

**Presenter:** HECHT (UNM), Adam

**Session Classification:** Session Five

Contribution ID: 86

Type: **not specified**

## **4He Stopping Cross Sections:( $\alpha$ ,n) Yields for Nuclear Applications**

*Thursday, 3 March 2022 08:30 (15 minutes)*

**Presenters:** CROFT (LU), Stephen; Dr FAVALLI, Andrea (EC, JRC, Ispra (Italy))

**Session Classification:** Session Five

Contribution ID: 87

Type: **not specified**

## **Measurements of ion-electron energy-transfer cross section in High Energy Density Plasmas**

*Thursday, 3 March 2022 08:45 (15 minutes)*

**Presenter:** ADRIAN (MIT), Patrick

**Session Classification:** Session Five

Contribution ID: **88**

Type: **not specified**

## **Data Needs for Particle Therapy**

*Thursday, 3 March 2022 09:00 (15 minutes)*

**Presenter:** KEPPEL (JLAB), Cynthia

**Session Classification:** Session Five

Contribution ID: **89**

Type: **not specified**

## **LET of Recoil Ions in Space Flight Electronics**

*Thursday, 3 March 2022 09:30 (20 minutes)*

**Presenter:** OSHERHOFF (NASA), Jason

**Session Classification:** Session Five

Contribution ID: 90

Type: **not specified**

## **The Berkeley Accelerator Space Effects (BASE) Facility**

*Thursday, 3 March 2022 09:50 (20 minutes)*

**Presenter:** JOHNSON (LBNL), Michael

**Session Classification:** Session Five

Contribution ID: 91

Type: **not specified**

## **Impact of Proton-Induced Fission Fragments on SEE: Community Need for Nuclear Data**

*Thursday, 3 March 2022 10:10 (20 minutes)*

**Presenter:** TURFLINGER (AERO), Tom

**Session Classification:** Session Five



Contribution ID: 92

Type: **not specified**

## **Stopping Power in ion beam therapy and biology: Bragg additivity, collective effects, and wakes**

*Thursday, 3 March 2022 10:30 (20 minutes)*

**Presenter:** OBCEMEA (NCI), Ceferino

**Session Classification:** Session Five

Contribution ID: 93

Type: **not specified**

## Discussion

*Thursday, 3 March 2022 10:50 (40 minutes)*

**Session Classification:** Session Five

Contribution ID: 94

Type: **not specified**

## **Nuclear Data Interests of the Nuclear Forensics Research Community**

*Monday, 28 February 2022 14:05 (20 minutes)*

**Presenter:** KIESS (NNSA), Thomas E. (NNSA Director, Office of Nuclear Detonation Detection)

**Session Classification:** Opening Plenary

Contribution ID: 95

Type: **not specified**

## **Defense Threat Reduction Agency**

*Monday, 28 February 2022 10:35 (20 minutes)*

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

**Session Classification:** Opening Plenary

Contribution ID: 96

Type: **not specified**

## **Measurements of Independent Fission Product Yields**

*Friday, 4 March 2022 09:15 (15 minutes)*

**Presenter:** SNYDER (LLNL), Luke (Lawrence Livermore National Laboratory)

**Session Classification:** Closing Plenary

Contribution ID: 97

Type: **not specified**

## **Modernization and Optimization of the Evaluated Nuclear Structure Data File**

*Friday, 4 March 2022 10:00 (15 minutes)*

**Presenter:** MCCUTCHAN (BNL), Elizabeth (Brookhaven National Laboratory)

**Session Classification:** Closing Plenary

Contribution ID: 98

Type: **not specified**

## **Improving the $^{238}\text{U}(n,n')$ cross section using neutron-gamma coincidences**

*Friday, 4 March 2022 08:15 (15 minutes)*

**Presenter:** BERSTEIN (LBL), Lee (Lawrence Berkeley National Laboratory)

**Session Classification:** Closing Plenary

Contribution ID: 99

Type: **not specified**

## **Neutron Scattering Cross Sections: (n,n'), (n,n'g), and (n,g) Measurements**

*Friday, 4 March 2022 10:15 (15 minutes)*

**Presenter:** VANHOY (USNA), Jeff

**Session Classification:** Closing Plenary



Contribution ID: **100**

Type: **not specified**

## **Energy Dependent Fission Product Yields**

*Friday, 4 March 2022 09:45 (15 minutes)*

**Presenter:** SILANO (LLNL), Jack (Lawrence Livermore National Laboratory)

**Session Classification:** Closing Plenary

Contribution ID: **101**

Type: **not specified**

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

*Friday, 4 March 2022 08:45 (15 minutes)*

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

**Session Classification:** Closing Plenary

Contribution ID: 102

Type: **not specified**

# **Integral Measurements of Independent and Cumulative Fission Product Yields Supporting Nuclear Forensics and Other Applications**

*Friday, 4 March 2022 08:30 (15 minutes)*

**Presenter:** BREDEWEG (LANL), Todd (Los Alamos National Laboratory)

**Session Classification:** Closing Plenary

Contribution ID: **103**

Type: **not specified**

## **Overview on reactions on unstable nuclei for applications**

*Tuesday, 1 March 2022 07:30 (20 minutes)*

**Presenter:** RESSLER (LLNL), Jo

**Session Classification:** Session One

Contribution ID: **104**

Type: **not specified**

## **First and direct measurements on Ni-56 and Ni-59 with fast neutrons at LANSCE**

*Tuesday, 1 March 2022 07:50 (20 minutes)*

**Presenter:** KUVIN (LANL), Sean

**Session Classification:** Session One

Contribution ID: **105**

Type: **not specified**

## **Reaction studies on unstable nuclei at NIF for Stewardship Science**

*Tuesday, 1 March 2022 08:10 (20 minutes)*

**Presenter:** DESPOTOPULOS (LLNL), John

**Session Classification:** Session One

Contribution ID: 106

Type: **not specified**

## **Enabling direct reaction studies with very small, highly radioactive targets**

*Tuesday, 1 March 2022 08:30 (20 minutes)*

**Presenter:** DIGIOVINE (LANL), Brad

**Session Classification:** Session One

Contribution ID: **107**

Type: **not specified**

## **Separation of unstable isotopes from irradiated targets in hot cells and their characterization**

*Tuesday, 1 March 2022 08:50 (15 minutes)*

**Presenter:** MOCKO (LANL), Veronika

**Session Classification:** Session One



Contribution ID: **108**

Type: **not specified**

## **Overview on reactions on unstable nuclei for astrophysics at FRIB**

*Tuesday, 1 March 2022 09:20 (20 minutes)*

**Presenter:** SCHATZ (JINA/MSU), Hendrik

**Session Classification:** Session One

Contribution ID: **109**

Type: **not specified**

## **Overview on theoretical effort for indirect reaction studies**

*Tuesday, 1 March 2022 09:40 (20 minutes)*

**Presenter:** ESCHER (LLNL), Jutta

**Session Classification:** Session One

Contribution ID: 110

Type: **not specified**

## **Beta-Oslo measurements for neutron capture reactions**

*Tuesday, 1 March 2022 10:00 (20 minutes)*

**Presenter:** LIDDICK (MSU), Sean

**Session Classification:** Session One

Contribution ID: 111

Type: **not specified**

## **Surrogate measurements for reactions on unstable nuclei**

*Tuesday, 1 March 2022 10:20 (20 minutes)*

**Presenter:** RATKIEWICZ (LLNL), Andrew

**Session Classification:** Session One

Contribution ID: 112

Type: **not specified**

## **Development of new capabilities for the measurement of (p,n) reactions with unstable nuclei at FRIB using ReA and SECAR**

*Tuesday, 1 March 2022 10:40 (15 minutes)*

**Presenter:** PERDIKAKIS (CMU/JINA), Georgios

**Session Classification:** Session One

Contribution ID: 113

Type: **not specified**

## **Reaction study using radioactive beams on neutron target, “measuring impossible reaction rates”**

*Tuesday, 1 March 2022 10:55 (15 minutes)*

**Presenter:** MOSBY (LANL), Shea

**Session Classification:** Session One

Contribution ID: 114

Type: **not specified**

**Discussion to solicit community input on “Reactions on Unstable Nuclei”; New development/coordination in specific reactions, radioactive target R&Ds, optimized detectors,unstable nuclear data evaluation...;**

*Tuesday, 1 March 2022 11:10 (20 minutes)*

**Presenters:** SEVERIN (MSU), Greg; LEE (LANL), Hye Young; DESPOTOPULOS (LLNL), John; BATCHELDER (UC BERKELEY), Jon

**Session Classification:** Session One

Contribution ID: 115

Type: **not specified**

## Introduction

*Wednesday, 2 March 2022 12:30 (2 minutes)*

**Presenter:** BECK (LLNL), Bret

**Session Classification:** Session Four



Contribution ID: 116

Type: **not specified**

## **NP Perspectives on Advancing the Nuclear Data Pipeline**

*Thursday, 3 March 2022 12:45 (5 minutes)*

**Presenter:** JANKOWSKI (DOE), Keith

**Session Classification:** Session Six

Contribution ID: **117**

Type: **not specified**

## Welcome

*Thursday, 3 March 2022 07:30 (5 minutes)*

**Session Classification:** Session Five

Contribution ID: 118

Type: **not specified**

## **Overview of the Needs for Nuclear Structure & Nuclear Astrophysics Applications**

*Monday, 28 February 2022 08:25 (20 minutes)*

**Presenter:** STEPHENSON, Sharon (DOE NP)

**Session Classification:** Opening Plenary

Contribution ID: 119

Type: **not specified**

## **The Space Radiation Environment and its Impact on Space Systems**

*Monday, 28 February 2022 08:45 (30 minutes)*

**Presenter:** O'BRIEN, Paul (Aero)

**Session Classification:** Opening Plenary

Contribution ID: 120

Type: **not specified**

## **Defense Nuclear Nonproliferation R&D: Near-field Detection**

*Monday, 28 February 2022 09:40 (20 minutes)*

**Presenter:** ZHU, Hongguo (Hank) (NNSA)

**Session Classification:** Opening Plenary

Contribution ID: **121**

Type: **not specified**

## **Safeguards NA-22**

*Monday, 28 February 2022 12:25 (20 minutes)*

**Presenter:** RAMOS, Christopher (NNSA)

**Session Classification:** Opening Plenary

Contribution ID: 122

Type: **not specified**

## **The DOE Isotope Program Annual Update and Perspective on Nuclear Data**

*Monday, 28 February 2022 13:05 (30 minutes)*

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

**Session Classification:** Opening Plenary

Contribution ID: 123

Type: **not specified**

## **Countering Weapons of Mass Destruction Data Needs**

*Monday, 28 February 2022 13:50 (15 minutes)*

**Presenter:** MILLER, Cameron (DHS)

**Session Classification:** Opening Plenary



Contribution ID: 124

Type: **not specified**

## **Nuclear data needs for human space radiation shielding**

*Monday, 28 February 2022 14:25 (30 minutes)*

**Presenter:** NORBURY, John (NASA)

**Session Classification:** Opening Plenary

Contribution ID: 125

Type: **not specified**

## **Novel Approach for Improving Antineutrino Spectra Predictions for Nonproliferation Applications**

*Friday, 4 March 2022 07:30 (15 minutes)*

**Presenter:** KONDEV, Filip (ANL)

**Session Classification:** Closing Plenary

Contribution ID: 126

Type: **not specified**

## **Improving the Nuclear Data on Fission Product Decays at CARIBU**

*Friday, 4 March 2022 07:45 (15 minutes)*

**Presenter:** HOFF, Daniel (LLNL)

**Session Classification:** Closing Plenary

Contribution ID: 127

Type: **not specified**

## **Beta-strength function, reactor decay heat, and anti-neutrino properties from total absorption spectroscopy of fission fragments**

*Friday, 4 March 2022 08:00 (15 minutes)*

**Presenter:** RYKACZEWSKI, Krzysztof (ORNL)

**Session Classification:** Closing Plenary

Contribution ID: 128

Type: **not specified**

## **Independent Fission Product Yields from 0.5 to 20 MeV**

*Friday, 4 March 2022 09:30 (15 minutes)*

**Presenter:** WINKELBAUER, Jack (LANL)

**Session Classification:** Closing Plenary

Contribution ID: 130

Type: **not specified**

## **Session One Summary: Reactions on Unstable Nuclei**

*Friday, 4 March 2022 11:30 (20 minutes)*

**Session Classification:** Closing Plenary

Contribution ID: 131

Type: **not specified**

## **Session Two Summary: Nuclear Data for High Energy Ion Interactions and Secondary Particle Production**

*Friday, 4 March 2022 11:50 (20 minutes)*

**Session Classification:** Closing Plenary

Contribution ID: 132

Type: **not specified**

## **Session Three Summary: Neutrons as Secondary Particles and Their Interactions with Matter**

*Friday, 4 March 2022 12:10 (20 minutes)*

**Presenter:** Dr HEILBRONN, Lawrence (University of Tennessee)

**Session Classification:** Closing Plenary



Contribution ID: 133

Type: **not specified**

## **Session Four Summary: Photon Reactions and Transport**

*Friday, 4 March 2022 12:50 (20 minutes)*

**Session Classification:** Closing Plenary

Contribution ID: 134

Type: **not specified**

## **Session Five Summary: Stopping Powers, Energy Deposition and Dose**

*Friday, 4 March 2022 12:30 (20 minutes)*

**Session Classification:** Closing Plenary

Contribution ID: 135

Type: **not specified**

## **Session Six Summary: Nuclear Data adjustments and Impact on Applications**

*Friday, 4 March 2022 13:10 (20 minutes)*

**Session Classification:** Closing Plenary

Contribution ID: 136

Type: **not specified**

## **Closing Remarks/Open Discussion**

*Friday, 4 March 2022 13:30 (30 minutes)*

**Session Classification:** Closing Plenary

Contribution ID: 139

Type: **not specified**

## Missile Defense Agency Overview

*Monday, 28 February 2022 14:55 (20 minutes)*

**Presenter:** BULK, Tom (MDA)

**Session Classification:** Opening Plenary

Contribution ID: 140

Type: **not specified**

## **Advanced Neutron Spectrometer on the International Space Station (ANS ISS)**

*Wednesday, 2 March 2022 09:45 (15 minutes)*

**Presenter:** CHRISTL (NASA), Mark

**Session Classification:** Session Three

Contribution ID: 141

Type: **not specified**

## **Importance of nuclear models and Monte Carlo tools for radiation effects simulations**

*Tuesday, 1 March 2022 16:25 (5 minutes)*

**Presenter:** GARCIA ALLA, Ruben

**Session Classification:** Session Two