

Technical Sessions

Monday 22

Fission Observables - 9:00-12:00

Chaired by O. Serot

- [jefdoc-2053] **S. Oberstedt** [30'] "*JRC Geel : nuclear fission research at GELINA and MONNET*"
- [jefdoc-2054] **V. Piau** [20'] "*New results on prompt gamma-rays multiplicity*"
- [jefdoc-2055] **S. Chiba** [30'] "*Evaluation of fission product yields and their covariance matrices*"
- **Coffee break** [20']
- [jefdoc-2056] **S. M. Cheikh** [20'] "*Test of models for isotopic yields evaluation*"
- [jefdoc-2057] **J. Taieb** [30'] "*Prompt fission neutron of ^{239}Pu : new high accuracy measurement of nubar and PFNS*"
- [jefdoc-2058] **B. Geslot** [20'] "*Recent experiments at ILL for measuring delayed neutrons induced by thermal fission*"

Lunch break - 12:00-13:00

Nuclear Data Uncertainties - 13:00-15:30

Chaired by R. Ichou and C. De Saint Jean

Nuclear Data Uncertainties - 13:00-15:30 Chaired by R. Ichou and C. De Saint Jean

- [jefdoc-2059] **I. Kodeli** [20'] "*Mathematical verification of JEFF-3.3 and ENDF/B-VIII.0 covariance data*"
- [jefdoc-2060] **R. Ichou** [20'] "*WPNCS SG7-10 activities on nuclear data uncertainty estimation on depletion calculations for the ARIANE GU3 benchmark*"
- [jefdoc-2061] **D. Rochman** [20'] "*Impact of JEFF-3.3, ENDF/B-VIII.0 and JENDL-4.0 uncertainties on PIE isotopic compositions and decay heat*"
- **Coffee break** [20']
- [jefdoc-2062] **O. Cabellos** [20'] "*WPEC/SG46 TAR exercise: preliminary results*"
- [jefdoc-2063] **D. Bernard** [20'] "*Decay Heat: ND uncertainty propagation (methodology, impact of FY correlations and focus on the ^{239}Np /endf/Decay Data) and CLAB experimental validation*"

Decay Data - 15:30-18:00

Chaired by A. Algora and M.A. Kellett

- [jefdoc-2064] **X. Mougeot** [20'] "*The BetaShape code to calculate accurate beta and neutrino spectra and their usefulness for JEFF*"
- [jefdoc-2065] **S. Leblond** [20'] "*Advances in beta spectra measurements at the LNHB*"
- [jefdoc-2066] **M.A. Kellett** [15'] "*The future JEFF-4 Radioactive Decay Data sub-library*"
- **Coffee break** [20']
- [jefdoc-2067] **A. Algora** [20'] "*TAGS measurements for reactor applications: recent results*"
- [jefdoc-2068] **M. Fallot** [20'] "*TAGS measurements and neutrino applications*"
- [jefdoc-2069] **V. Dimitriou** [20'] "*Beta-delayed neutrons: IAEA CRP and reference database*"

Tuesday 23

Experiments - 8:30-11:30*Chaired by Maëlle Kerveno*

- [jefdoc-2070] **M. Kerveno** [5'] "Opening remarks"
- [jefdoc-2071] **A. Junghans** [20'] " $^{16}\text{O}(n,\alpha)$ and nat-Fe transmission experiments at nELBE"
- [jefdoc-2072] **A. Negret** [20'] "Inelastic measurements with GAINS and GRAPHEME at GELINA"
- [jefdoc-2073] **S. Kopecky** [20'] "Review of new transmission and capture data available for JEFF4"
- **Coffee break** [20']
- [jefdoc-2074] **D. Cano-Ott** [20'] "The latest n-TOF measurements for JEFF and prospects"
- [jefdoc-2075] **G. Zerovnik** [20'] "Am-241 neutron activation measurements at JSI TRIGA reactor"

Evaluation Methods - 11:30-12:30*Chaired by D. Rochman and L. Leal*

- [jefdoc-2076] **R. Capote** [30'] "INDEN evaluation of major actinides: U-235, U-238, U-233, and Pu-239"
- [jefdoc-2077] **L. Leal** [30'] "Evaluation at IRSN"

Lunch break - 12:30-13:30**Evaluation Methods - 13:30-16:30***Chaired by D. Rochman and L. Leal*

- [jefdoc-2078] **G. Schnabel** [30'] "Nuclear data evaluation with Bayesian networks"
- [jefdoc-2079] **A. Koning** [30'] "New TENDL/JEFF evaluations for the isotopes of Ag, Pm, Eu and Lu"
- [jefdoc-2080] **S. Kopecky** [15'] "JRC Geel evaluation work"
- **Coffee break** [15']
- [jefdoc-2081] **E. Dupont** [15'] "n_TOF data available for JEFF-4"
- [jefdoc-2082] **D. Brown** [15'] "The recent ENDF/B-VIII efforts"
- [jefdoc-2083] **G. Noguere** [15'] "JEFFlab evaluations"

Machine Learning - 16:30-18:00*Chaired by O. Cabellos*

- [jefdoc-2084] **O. Cabellos** [15'] "Opening remarks"
- [jefdoc-2085] **A. Koning** [15'] "EXFOR and outliers"
- [jefdoc-2086] **D. Neudecker** [15'] "Using ML and various integral responses to identify unconstrained physics spaces in nuclear data"
- [jefdoc-2087] **H. Sjöstrand** [15'] "Using Gaussian Processes for the evaluation of Fe-56"
- [jefdoc-2088] **A. Sanchez-Caballero** [15'] "Deep Learning applied to capture cross section data analysis"
- [jefdoc-2089] **R. D. Lasserri** [15'] "Using Neural approaches to refine photo-reaction section evaluation"
- **All** [10'] "Discussion and comments"

Wednesday 24**Benchmarking - 9:00-12:00***Chaired by N. Leclaire*

- [jefdoc-2090] **N. Leclaire** [20'] "Calculation of the kritz-LWR-RESR-004 benchmark with MORET 5 CODE"
- [jefdoc-2091] **O. Cabellos** [20'] "Testing of the JEFF-3.3 with IRPhEP/LWR KRITZ Benchmark"

- [jefdoc-2092] **D. Rochman** [20'] "*Selection of Pu239 and TSL for JEFF-4.0, based on random sampling and criticality benchmarks*"
- [jefdoc-2093] **I. Hill** [20'] "*Updates to the NEA Nuclear Data and Sensitivity Tool (NDaST)*"
- **Coffee break** [15']
- [jefdoc-2094] **S. Van der Marck** [20'] "*Observations based on benchmarking results for JEFF-4T0*"
- [jefdoc-2095] **F. Alvarez Velarde** [20'] "*Nuclear data recommendations from sensitivity calculations done in EURAD EU project*"
- [jefdoc-2096] **T. Taylor** [20'] "*Nuclear data for chloride fast reactors*"
- [jefdoc-2097] **A. Jimenez-Carrascosa** [10'] "*Impact of Doppler calculation in SEFOR Benchmark due to the differences between JEFF-3.3 and JEFF-3.1.1*"*

Lunch break - 12:00-13:00

Thermal Scattering Law - 13:00-15:30

Chaired by J. I. Marquez Damian

- [jefdoc-2098] **V. Jaiswal** [20'] "*Thermal Scattering Cross-Sections for Hydrogen Fluoride*"
- [jefdoc-2099] **J. I. Marquez Damian** [20'] "*NJOY+NCrystal: Update of the Code and Thermal Scattering Library*"
- [jefdoc-2100] **K. Ramic** [20'] "*Thermal Neutron Scattering Evaluation for Polyethylene from RPI/ORNL/ESS*"
- **Coffee break** [20']
- [jefdoc-2101] **G. Noguere** [20'] "*Thermal Scattering Law activities at CEA/DES Cadarache*"
- [jefdoc-2102] **H. Ayman** [20'] "*WPEC Subgroup (SG) 48: Advances in Thermal Scattering Law Analysis*"

Theory - 15:30-17:00

Chaired by S. Hilaire

- [jefdoc-2103] **R. Capote** [20'] "*Nuclear reaction modelling of neutron scattering on fissile targets*"
- [jefdoc-2104] **G. Nobre** [20'] "*Nuclear level density constraints (and the neutron resonance rabbit hole...)*"
- [jefdoc-2105] **A. Mengoni** [20'] "*DRC modeling for nuclear data evaluations*"
- [jefdoc-2106] **M. Dupuis** [20'] "*Modeling of direct and pre-equilibrium reactions : focus on spin distributions*"

Thursday 25

Processing - 9:00-10:30

Chaired by O. Cabellos

- [jefdoc-2107] **A. Jimenez-Carrascosa** "*Processing of JEFF ND libraries for the SCALE Code System and testing with criticality experiments*"*
- [jefdoc-2108] **K. Tada** "*Nuclear Data Processing Code FRENDY Version 2*"
- [jefdoc-2109] **O. Cabellos** "*Processing covariances for WPEC/SG46 TAR Exercise*"
- [jefdoc-2110] **E. Alhassan** "*On the use of Bayesian Model Averaging in nuclear data evaluations*"

Depletion - 10:30-12:00

Chaired by D. Bernard

- [jefdoc-2111] **O. Cabellos** "*Comparison of Burnup Calculations for ND Validation Activities*"*
- [jefdoc-2112] **R. Ichou** "*Investigations on the kinf results with burnup using recent JEFF libraries*"

- [jefdoc-2113] **D. Bernard** "*The huge (and unknown) $^{135m}\text{Xe}(n,\gamma)$ xs and the $^{239}\text{Pu}(n_{th,f})^{153}\text{Eu}$ FY in JEFF-4.0 (and JEFF-3.3) and their impact on LWR-Xe poisoning peak and on the reactivity loss versus burnup respectively*"
- [jefdoc-2114] **A. Trkov** [20'] "*Impact of new INDEN evaluations in depletion*"

Lunch break - 12:00-13:00

JEFF-4 Status - 13:00-17:00

Chaired by A. Plompen

- [jefdoc-2115] **A. Plompen / D. Foligno** [40'] "*Survey results*"
- [jefdoc-2116] **M. Kerveno** [10'+5'] "*Summary Experiments session*"
- [jefdoc-2117] **O. Serot** [10'+5'] "*Summary Fission Observables session*"
- [jefdoc-2118] **A. Algora / M. Kellet** [10'+5'] "*Summary Decay-Data session*"
- [jefdoc-2119] **R. Ichou / C. De Saint Jean** [10'+5'] "*Summary ND Uncertainties session*"
- [-] **D. Rochman / L. Leal** [10'+5'] "*Summary Evaluation Methods session*"
- **Coffee break** [20']
- [jefdoc-2120] **O. Cabellos** [10'+5'] "*Summary Machine Learning session*"
- [-] **N. Leclaire** [10'+5'] "*Summary Benchmarking session*"
- [jefdoc-2121] **J. I. Marquez Damian** [10'+5'] "*Summary Thermal Scattering Law session*"
- [jefdoc-2122] **S. Hilaire** [10'+5'] "*Summary Theory session*"
- [jefdoc-2123] **O. Cabellos** [10'+5'] "*Summary Processing session*"
- [jefdoc-2124] **D. Bernard** [10'+5'] "*Summary Depletion session*"
- [jefdoc-2125] **D. Leichtle** [10'+5'] "*Summary Fusion session*"
- **All** "*Discussion*"

[Cocktail 17:00-18:00]

A cocktail reception will take place at the Château de La Muette, just after the Thursday's sessions.

Friday 26

JEFF Co-Ordination Group - 8:30-13:00 Chaired by A. Plompen

Reserved to the CG members