Session Program

21–29 Jul 2022



15th International Conference on Nuclear Data for Science and Technology (ND2022)

Theory/Codes

Gather.Town

Tuesday 26 July

11:15

Theory/Codes: I

Session | **Location:** Placerville | **Convener:** Ionel Stetcu

11:15–11:39 **Evaluation of charged-particle reactions in the resolved resonance region**

Speaker
Ian Thompson

11:39–11:51 **Interchange, Extension, and Validation of R-matrix fits for gamma production**

Speaker
Ian Thompson

11:51–12:03 **Spin assignments of neutron resonances with Machine Learning**

Speaker
Gustavo Nobre

12:03–12:15 **A novel R-matrix formalism for three-body channels**

Speaker
Mr Benedikt Raab

12:45

Wednesday 27 July

06:00

Theory/Codes: II

Session | **Location:** Placerville | **Convener:** Toshiiko Kawano

06:00–06:24

Microscopic description of target spin distribution afterinelastic scattering to the continuum

Speaker
Marc Dupuis

06:24–06:36 **Nuclear reaction modeling for neutron inelastic scattering process**

Speaker
Toshihiko Kawano

06:36–06:48

Present status of an R-matrix analysis code AMUR for cross-section evaluation in resolved resonance region

Speaker
Satoshi Kunieda

06:48–07:00 **A new R-matrix module for multi-channel calculations with GECCCOS**

Speaker
Thomas Srdinko

07:00–07:12 **An assessment of neutron resonance data for mid-mass isotopes**

Speaker
James Benstead

07:12–07:24 **Double-humped barrier effects in the R-matrix for fitting of fissile isotope**

Speaker
Dr Luiz Leal

07:30

07:45

Theory/Codes: III

Session | **Location:** Placerville | **Convener:** James Benstead

07:45–08:09

Recent advances within the QRPA framework to improve gamma strength function prediction

Speaker
Dr Sophie Péru

08:09–08:21

Modern Description of Nuclear Structure and Reactions: The Deformed QRPA Transition Densities for Inelastic Scattering Descriptions

Speaker
Emanuel Chimanski

08:21–08:33 **Investigation of photodisintegration cross sections for virtual states**

Speaker
Dr Odsuren Myagmarjav

08:33–08:45
(WITHDRAWN) Calculation of giant dipole resonance with noniterative finite amplitude method

Speaker
Hirokazu Sasaki

08:45–08:57 **(WITHDRAWN) First-forbidden β-decay study in the pnQRPA approach**

Speaker
Arthur Beloeuvre

09:15

11:00

Theory/Codes: IV

Session | **Location:** Placerville | **Convener:** Goran Arbanas

11:00–11:24 **Ab initio theory applied to the evaluation of the 6Li(n,t)4He reaction**

Speaker
Konstantinos Kravvaris

11:24–11:36 **Model calculation for nucleon-induced ^{6,7}Li reactions**

Speaker
Xiaojun Sun

11:36–11:48 **Residual nuclei production in (p,π^{0}γ) reaction**

Speaker
Igor Moskalenko

11:48–12:00 **(WITHDRAWN) Study of Breakup Reactions of Weakly Bound nuclei ^{6,7}Li**

Speaker
Wendi Chen

12:30

Thursday 28 July

06:00

Theory/Codes: V

Session | **Location:** Placerville | **Convener:** Ian Thompson

06:00–06:24 **Quantum Computing for Nuclear Systems**

Speaker
Alessandro Baroni

06:24–06:36 **Probing Nuclear Uncertainties in Kilonova Modeling**

Speaker
Kelsey Lund

06:36–06:48 **Generating nucleon-nucleus scattering data by Gaussian process regression**

Speaker
Shoto Watanabe

06:48–07:00
Integrating Nuclear Shell Model and Hauser Feshbach Calculations for Fission Fragment Studies

Speaker
Oliver Gorton

07:00–07:12 **On Systematics of Double-Beta Decay Half Lives**

Speaker
Boris Pritychenko

07:12–07:24
Improved measurements and reaction modeling for the production of Sn-117m and Te-119m via proton bombardment on natural antimony up to 200 MeV

Speaker
Catherine Apgar

07:30

07:50

Theory/Codes: VI

Session | **Location:** Placerville | **Convener:** Gregory Potel Aguilar

07:50–08:14 **Statistical properties of neutron-rich strontium isotopes**

Speaker
Adriana Sweet

08:14–08:26
Improving nuclear data evaluations with predictive reaction theory and indirect measurements

Speaker
Jutta Escher

08:26–08:38
Testing the Extended SRM against the ^{238}U(^{3}He,^{4}He)^{237}U* surrogate probabilities

Speaker
Dr Olivier Bouland

08:38–08:50
Properties of compound nucleus decay width predicted by Gaussian Orthogonal Ensemble nuclear reaction model

Speaker
Toshihiko Kawano

08:50–09:02
Phenomenological R-Matrix parameterization of direct, doorway, and compound nuclear reactions

Speaker
Goran Arbanas

09:02–09:14 **Role of direct interactions in (d,p) and $(d,2p)$ reactions**

Speaker
Dr Marilena Avrigeanu

09:20

09:40 **Theory/Codes: VII**
Session | **Location:** Placerville | **Convener:** Marc Dupuis

09:40–10:04
Evaluation of the neutron-induced cross sections of actinides using the CONRAD computer program

Speaker
Gilles Noguere

10:04–10:16 **INDEN evaluation of neutron-induced reactions on ^{239}Pu**

Speaker
Roberto Capote

10:16–10:28
Importance of the residual nucleus level density model in the calculation of the ^{239}Pu$ (n,2n)^{238}$Pu excitation function

Speaker
Dr Olivier Bouland

10:28–10:40 **Evaluation of neutron-induced reactions on ^{239}Pu**

Speaker
Gregory Potel Aguilar

10:40–10:52 **Reexamining intermediate resonant structures in the 242Pu fission cross section**

Speaker
Carole Chatel

11:10

11:30 **Theory/Codes: VIII**
Session | **Location:** Placerville | **Convener:** Jutta Escher

11:30–11:42 **Recent developments in the Point Wise Neutron treatment for FLUKA v4**

Speaker
Vasilis Vlachoudis

11:43–11:55 **A new model for low-energy (<150 MeV/n) deuteron nuclear reactions in FLUKA**

Speakers
Dr Francesc Salvat Pujol, Gabriela Moryc

11:55–12:07 **Open-source Release of CGMF 1.1 and Integration into the MCNP6.3® Code**

Speaker
Michael Rising

12:07–12:19 **Nuclear data completion for analog simulations**

Speaker
Camilo Cordero Ramirez

12:19–12:31 **Proton-induced activation cross sections in the energy range below 10 GeV**

Speaker
Dr Igor Moskalenko

13:00