

Program: DAE-BRNS Theme Meeting

December 09, 2017 (Saturday)

09:00 - 09:10 K. Manjunatha Prasad: Welcome Address

09:10 - 09:20 SV Suryanarayana: Opening Remarks

SESSION 1; Chair Person: Peter Schillebeeckx

09:20 - 10:10 Srinivasan Ganesan: Advances in nuclear data covariance in the Indian Context

10:10 - 11:00 Helmut Leeb: Bayesian evaluation methods and uncertainty determination I

11:00 - 11:20 Tea Break

SESSION 2; Chair Person: Srinivasan Ganesan

11:20 - 12:10 SV Suryanarayana: Surrogate nuclear reactions for determining compound nuclear reaction cross sections of unstable nuclei for fusion technology applications

12:10 - 13:00 B. Lalremruta: Measurement of neutron capture cross-sections for ^{70}Zn at spectrum averaged energies of 0.41, 0.70, 0.96 and 1.69 MeV

13:00 - 14:30 Lunch Break

SESSION 3; Chair Person: Helmut Leeb

14:30 - 15:30 Peter Schillebeeckx: Neutron time-of-flight cross section measurement and its applications- I

15:30 - 16:00 Sripathi Punchithaya: Sensitivity analysis of estimation of efficiency of HPGe detector in the energy range of 0.050-1.500 MeV using different linear parametric functions

16:00 - 16:20 Tea Break

16:20 - 18:00 MU Team: Tutorials on covariance generation in nuclear data

December 10, 2017 (Sunday)

SESSION 4; Chair Person: Srinivasan Ganesan

09:00 - 10:00 Kallol Roy: Bayesian estimation and its application in data interpolation-I

10:00 - 10:50 Arjan Koning: Exact uncertainty propagation from nuclear data to technology with Total Monte Carlo Method-I

10:50 - 11:10 Tea Break

SESSION 5; Chair Person: SV Suryanarayana

11:10 - 12:00 Helmut Leeb: Bayesian evaluation methods and uncertainty determination - II

12:00 - 13:00 Kallol Roy: Bayesian estimation and its application in data interpolation-II

13:00 - 14:30 Lunch Break

SESSION 6; Chair Person: Helmut Leeb

14:30 - 15:30 Arjan Koning: Exact uncertainty propagation from nuclear data to technology with Total Monte Carlo- II

15:30 - 16:00 Rajeev Kumar: Covariance analysis in reactor physics experiments

16:00 - 16:20 Tea Break

SESSION 7; Chair Person: Alok Saxena

16:20 - 16:50 Reetuparna Ghosh: Measurement of and uncertainty propagation of the (γ, n) reaction cross section of ^{58}Ni and ^{59}Co at 15MeV bremsstrahlung

16:55 - 17:25 Anek Kumar: Introduction to covariance files in ENDF/B library

17:30 - 18:00 B. Rudraswamy: Efficiency calibration of HPGe detector and covariance analysis

December 11, 2017 (Monday)

SESSION 8; Chair Person: Alok Saxena

09:00 - 10:00 Arjan Koning: TALYS nuclear model code TENDL evaluated nuclear data library– Part I

10:00 - 10:50 Henrik Sjostrand: Adjustment of nuclear data libraries using integral benchmarks

10:50 - 11:10 Tea Break

SESSION 9; Chair Person: Mohamed Musthafa

11:10 - 12:00 Peter Schillebeeckx: Neutron time-of-flight cross section measurement and its applications–II

12:00 - 13:00 Arjan Koning: TALYS nuclear model code TENDL evaluated nuclear data library– II

13:00 - 14:30 Lunch Break

SESSION 10; Chair Person: Asha Kamath

14:30 - 15:30 Simo Puntanen: On the role of the covariance matrix in the linear statistical model

15:30 - 16:00 Alok Saxena: An overview of nuclear data activities in India

16:00 - 16:20 Tea Break

16:20 - 18:30 Arjan Koning: Tutorial

19:15 - 20:00 Inaugural Day Function of ICLAA 2017

20:00 - 21:00 DINNER

December 12, 2017 (Tuesday)

SESSION 11; Chair Person: B. Lalremruta

09:00 - 09:40 Henrik Sjostrand: Choosing nuclear data evaluation techniques to obtain complete and motivated covariances

09:40 - 10:30 Y Santhi Sheela: Covariance analysis in neutron Activation Measurements of $^{59}\text{Co}(n,2n)^{58}\text{Co}$ and $^{59}\text{Co}(n,\gamma)^{60}\text{Co}$ reactions in the MeV region

10:30 - 11:00 Jayalekshmi Nair: Error propagation techniques

11:00 - 11:30 Tea Break

SESSION 12; Chair Person: SV Suryanarayana

11:20 - 12:20 Peter Schillebeeckx: Adjustment of model parameters by a fit to experimental data

12:20 - 13:00 Uttiyornab Saha: Covariance matrices of DPA Cross Sections from TENDL-2015 for Structural Elements with NJOY-2016 and CRaD Codes

13:00 - 14:30 Lunch Break

SESSION 13; Chair Person: Helmut Leeb

14:30 - 15:00 Sangeetha Prasanna Ram: A stochastic convergence analysis of random number generator as applied to error propagation using Monte Carlo method and unscented transformation technique

15:00 - 15:30 Abhishek Cherath: A case study on the cross section data of $^{232}\text{Th}(n,2n)^{231}\text{Th}$: A look, with a covariance analysis at the 1961 data of Butler and Santry (EXFOR ID 12255)

15:30 - 16:00 Meghna R Karkera: To be announced

16:00 - 16:20 Tea Break

SESSION 14; Chair Person: Srinivasan Ganesan

16:20 - 16:50 Betylda Jyrwa: Measurement of Neutron Induced Reaction Cross Sections for $^{64}\text{Ni}(n,\gamma)^{65}\text{Ni}$ and $^{96}\text{Zr}(n,\gamma)^{97}\text{Zr}$ at $E_n = 0.025\text{eV}$

16:50-18:20 MU Team: Tutorials on covariance generation in nuclear data

December 13, 2017 (Wednesday)

SESSION 15; Chair Person: Srinivasan Ganesan

09:00 - 10:00 Helmut Leeb: Generalized least squares method: reformulation suitable for large scale nuclear data evaluation

10:00 - 10:30 Photo Session

10:30 - 11:00 Vidya Devi: Calculating efficiencies and their uncertainties propagation in efficiency

11:00 - 11:30 Tea Break

11:30 - 13:00 Panel Discussion

Title: In the Indian context, the current status and road map for the generations and use of covariance matrices in nuclear data

Panel Members: Dr. Helmut Leeb, Dr. Peter Schillebeeckx, Dr. S. Ganesan, Dr. Alok Saxena, Dr. K. Manjunatha Prasad, Dr. Sreekumaran Nair, Dr. Suryanarayana, Dr. Arjan Koning, Dr. B K Nayak, Dr. Sripathi Punchithaya

13:00 - 14:30 Lunch Break

14:30 - 16:00 VALEDICTORY

16:00 - 19:00 Cultural Program at Karantha Bhavan, KOTA

19:00 - 20:00 Dinner at Karantha Bhavan, KOTA

Usual food timings:

Breakfast 07:45 at MIT- Food Court

Lunch 13:00 at MIT- Food Court(refer schedule)

Dinner 20:00 at MIT-Food Court

Remark: 13th December, 2017 dinner is arranged at Karantha Bhavana, Kota. There is no arrangement for the dinner at MIT food Court.

Usual shuttle timings:

07:30 Pick up from New International Hostel(NIH) for Breakfast

08:30 Pick up from FIVV to conference venue

08:40 Pick up from MIT-Food Court to conference venue

13:00 Pick up from Conference Venue (NLH) to MIT-Food Court for Lunch(refer Schedule)

14:00 Pick up from MIT-Food Court to conference venue

18:00 Pick up from Conference Venue (NLH) to New International Hostel(NIH) and FIVV

19:45 Pick up from New International Hostel (NIH) and FIVV to MIT-Food court for dinner

20:45 Pick up from MIT-Food Court to New International Hostel(NIH) and FIVV