

PEND-2

Perspectives on Nuclear Data for the Next Decade

International advisory committee :

E. Bauge – CEA,DAM,DIF – France
R. Capote – IAEA – Austria
M.B. Chadwick – LANL – USA
A. Couture – LANL – USA
R.C. Haight – LANL – USA
J. Escher – LLNL – USA
H. Goutte – CEA,DSM,Saclay – France
S. Hilaire – CEA,DAM,DIF – France
A.J. Koning – NRG Petten – The Netherlands
A. Plompen – IRMM Geel – Belgium
L. Robledo – UAM Madrid – Spain
L. Tassan-Got – IPN Orsay – France

Local organizing committee :

S. Hilaire
G. Bélier
G. Blanchon
P. Dossantos-Uzan/alde
M. Dupuis
J.P. Ebran
O. Roig
S. Péru
V. Diabovich (secretary)

2nd Edition – Bruyères-le-Châtel – 14-17 Octobre 2014

Contact & informations : stephane.hilaire@cea.fr
CEA,DAM,DIF – F91297 – Arpajon – France



Program

Tuesday, October 14th

9:15-9:45

Registration & Welcome

Chairperson *A.J. Koning*

9:45-10:15 **A. Plompen**

10:15-10:45 **S. Chiba**

Why do we still need nuclear data?

Perspectives of research and education in nuclear data after Fukushima

10:45-11:00

Coffee break

Chairperson *T. Kawano*

11:00-11:30 **T. Duguet**

11:30-12:00 **G. Colin de Verdière**

12:00-12:30 **R. Capote**

Potential interplay between ab-initio and energy density functional approaches

Computing element evolution and its impact on simulation codes

Nuclear data evaluation challenges

12:30-14:30

Lunch break

Chairperson *J. Escher*

14:30-15:00 **T. Kawano**

15:00-15:30 **G. Blanchon**

15:30-16:00 **P. Chau**

Challenges beyond Hauser-Feshbach for nuclear reactions modeling

Microscopic potential with Gogny interaction

Deuteron induced reactions within the CDCC formalism: from differential cross sections to excitation function?

16:00-16:15

Coffee break

Chairperson *R. Capote*

16:15-16:45 **M. Kerveno**

16:45-17:15 **M. Dupuis**

17:15-17:45 **J. Escher**

17:45-18:15 **P. Romain**

(n,xny) cross sections: relevant tests for nuclear reaction codes?

Connecting structure and direct reactions modeling

Surrogate reactions: status and prospects

The inverse problem: would it be possible?

Wednesday, October 15th

<i>Chairperson</i>	<i>S. Goriely</i>	
9:15-9:45	D. Lunney	Mass determinations for nuclear and astrophysics
9:45-10:15	N. Schunck	Quantifying uncertainties in nuclear density functional theory
10:15-10:45	M. Guttormsen	Nuclear level densities from an experimental point of view
10:45-11:00	Coffee break + Workshop photo	
<i>Chairperson</i>	<i>T. Duguet</i>	
11:00-11:30	Y. Alhassid	The shell model Monte Carlo approach to level densities: recent developments and perspectives
11:30-12:00	S. Goriely	Towards more accurate and reliable predictions for nuclear (astrophysics) applications
12:00-13:30	Lunch break	
13:30-14:30	CURIE visit	
<i>Chairperson</i>	<i>N. Dubray</i>	
14:30-15:00	P. Möller	Modeling odd-even staggering in fission fragment yields in the Brownian shape-motion approach: current results and prospects
15:00-15:30	J-F. Martin	SOFIA Fission studies at GSI
15:30-16:00	F. Farget	Transfer-induced fission in inverse kinematics : impact on experimental and evaluated nuclear data bases
16:00-16:15	Coffee break	
<i>Chairperson</i>	<i>S. Oberstedt</i>	
16:15-16:45	N. Dubray	Self-consistent adiabatic description of the fission: automatic production of class-II PES
16:45-17:15	F. Tovesson	Fission studies with TPC and SPIDER: current status and future directions
17:15-17:45	K-H. Schmidt	Revealing hidden regularities with a general approach to fission
17:45-18:15	S. Panebianco	The SPY model: how a microscopic description of the nucleus can shed some light on fission

Thursday, October 16th

<i>Chairperson</i>	<i>F. Farget</i>	
9:15-9:45	O. Litaize	Modeling fission in FIFRELIN
9:45-10:15	S. Oberstedt	Future research program on prompt γ -ray emission in nuclear fission
10:15-10:45	H. Goutte	Single-particle degrees of freedom in fission
10:45-11:00	Coffee break	
<i>Chairperson</i>	<i>O. Roig</i>	
11:00-11:30	X. Ledoux	Neutron facilities
11:30-12:00	M. Jandel	Capture and fission with DANCE and NEUANCE
12:00-12:30	A. Kimura	Current activities and future plans for nuclear data measurements at J-PARC
12:30-14:30	Lunch break	
<i>Chairperson</i>	<i>E. Bauge</i>	
14:30-15:00	C. De Saint Jean	From low to high energy nuclear data evaluations Issues and perspectives on nuclear reaction models and covariances
15:00-15:30	P. Talou	Uncertainties and correlations in nuclear fission data: the role of models and experiments
15:30-16:00	D. Rochman	The truth about TENDL
16:00-16:15	Coffee break	
<i>Chairperson</i>	<i>P. Dossantos-Uzarralde</i>	
16:15-16:45	J-C. Sublet	Processing: the end of an era?
16:45-17:15	C. Mattoon	Designing a new format for storing nuclear data
17:15-17:45	F. Gaudier	Uncertainties propagation with URANIE
17:45-18:15	M. Chadwick	Nuclear science opportunities at LANSCE/Lujan center
19:30-???	Conference diner	

Friday, October 17th

<i>Chairperson</i>	<i>A. Plompen</i>	
9:15-9:45	R.C. Haight	Perspectives on measurements of prompt fission neutron spectra for fission induced by fast neutrons
9:45-10:15	F. Michel-Sendis	Activities and challenges related to nuclear data at NEA
10:15-10:45	A. Koning	From nuclear data to nuclear reactors Looping over nuclear science
10:45-11:00	Coffee break	
<i>Chairperson</i>	<i>L. Véron</i>	
11:00-11:30	D-M. Filipescu	Photonuclear reactions at Extreme Light Infrastructure - Nuclear Physics (ELI-NP)
11:30-12:00	N. Gharibyan	Radiochemical measurements of neutron capture and isomeric data at the NIF
12:00-12:30	Conclusions	
12:30-14:30	End of the Workshop	