



4th International Workshop On Nuclear Data Evaluation for Reactor applications



WONDER 2015

October 5th – October 8th, 2015
Aquabella hotel - Aix-en-Provence, France

Monday October 5th, 2015

Lunch (buffet) and Registration	12:00-14:00		
	Introduction		
	14:00-14:20	Welcome addresses from Christian BONNET (Director of the CEA-Cadarache center) and Frank CARRE (Scientific Director of the Nuclear Energy Division)	
	Nuclear Data needs for reactor applications		
(Chair: O. Serot)	14:20-14:50	Simon RAVAUX	The nuclear data - A key component for reactor studies - Overview of AREVA needs and applications
	14:50-15:10	Christophe DESTOUCHES	Review of nuclear data improvement needs for nuclear radiation measurement techniques used at the CEA experimental reactor facilities
	Microscopic nuclear data measurements		
(Chair: A. Plompen)	15:10-15:40	Yaron DANON	Recent Nuclear Data Measurement at the Gaertner LINAC Center at RPI
	15:40-16:10	Maria DIAKAKI	Towards the high-accuracy determination of the ²³⁸ U fission cross section at the threshold region at CERN - n_TOF
Coffee break			
	16:40-17:00	Ignacio DURAN ESCRIBANO	CERN-nTOF ²³⁵ U(n,f) cross-section in the Resolved Resonance Region.
	17:00-17:20	Jorge LERENDEGUI	New experimental data on ²⁴² Pu(n,g) at n_TOF
(Chair: Y. Danon)	17:20-17:40	David DENIS-PETIT	Radiative capture to isomers studies on ¹⁷⁶ Lu isotope using the DANCE array at LANL
	17:40-18:00	Atsushi KIMURA	Neutron capture cross-section measurements of Gd-155 and Gd-157 in J-PARC/MLF/ANNRI
	18:00-18:20	Stefan KOPECKY	Experimental validation of resonance files

Tuesday morning, October 6th, 2015

		Evaluation of nuclear data (theories, models, codes)		
	(Chair: R. Capote)	09:00-09:30	Arjan PLOMPEN	Solving Challenges in Nuclear Data and the future of the Joint Evaluated Fission and Fusion Library
		09:30-09:50	Oscar CABELLOS DE FRANCISCO	Activities of the NEA Working Party on International Nuclear Data Evaluation Co-operation project (WPEC)
		09:50-10:10	Gustavo NOBRE	New 56Fe evaluation for the CIELO Project
		10:10-10:30	Nobuyuki IWAMOTO	Evaluation of Neutron Capture Cross Sections and Covariances on 99Tc and 129I in the keV Energy Region
Coffee break				
	(Chair: R. Capote)	11:00-11:20	Olivier BOULAND	Monte Carlo simulation of transfer reactions using extended R-matrix theory
		11:20-11:40	Jose Manuel QUESADA	A Lane consistent optical model potential for nucleon scattering on actinide nuclei with extended coupling
		Thermal scattering laws		
	(Chair: G. Noguere)	11:40-12:00	Juan Pablo SCOTTA	Study of neutron scattering in light water in Mistral experience carried out in EOLE reactor
		12:00-12:20	Iyad AL-QASIR	Thermal Neutron Scattering Law of BeO Using Ab Initio Lattice Dynamics

Tuesday afternoon, October 6th, 2015

		Emission of Prompt Fission Neutron and Gamma		
	(Chair: C. Wagemans)	14:00-14:30	Roberto CAPOTE	Prompt fission neutron spectra of major actinides at the thermal point
		14:30-14:50	Alf GOOK	Prompt Fission Neutron Emission from $^{235}\text{U}(n,f)$ in the Resolved Resonance Region
		14:50-15:10	Anabella TUDORA	Even-odd effects in the prompt fission emission of even Z actinides
		15:10-15:30	Zsolt ELTER	Energy Correlation of Prompt Fission Neutrons
		15:30-15:50	Denise NEUDECKER	Evaluations of ^{239}Pu and ^{235}U Prompt Fission Neutron Spectra Induced by Thermal to 30 MeV Neutrons
Coffee break				
		Processing and benchmarking (Chair: O. Cabellos)		
	(Chair: O. Cabellos)	16:20-16:50	Jonathan WALSH	Neutron Cross Section Processing Methods for Improved Integral Benchmarking of URR Evaluations
		16:50-17:10	Franco MICHEL-SENDIS	NDEC: Development of an automated platform for the verification, testing, processing and benchmarking of Evaluated Nuclear Data at the NEA Data Bank
		17:10-17:30	Carlos Javier DIEZ DE LA OBRA	On the processing of JEFF-3.2 neutron data library with AMPX 6.2 for its use with the SCALE tool suite
		17:30-17:50	Raphaelle ICHOU	Use of integral experiments for the assessment of the ^{235}U capture cross section within the CIELO Project
		17:50-18:10	Cedric JOUANNE	GALILEE-1: a validation and processing system for ENDF-6 and GND evaluations
		18:10-18:30	Pietro MOSCA	Need of a consistent and convenient nucleus identification in ENDF files for the automatic construction of the depletion chains

Wednesday October 7th, 2015

		Integral nuclear data measurements		
	(Chair: C. De Saint Jean)	08:30-08:50	Pierre LECONTE	Thermal neutron activation experiments of Mo, Zn, Eu, Sn and Zr
		08:50-09:10	Shigeaki OKAJIMA	Fission rate ratios of FCA-IX assemblies as integral experiment for assessment of TRU's fission cross section
		09:10-09:30	Mario CARTA	Feasibility study of the AOSTA experimental campaign
		Decay data and Fission Yields (Chair: A. Tudora)		
	(Chair: A. Tudora)	09:30-10:00	Audrey CHATILLON	The SOFIA experiment: measurement of the isotopic fission fragments yields
Coffee break				
		10:30-10:50	Christophe SAGE	²³³U mass yield measurements around and within the symmetry region with the ILL Lohengrin spectrometer
		10:50-11:10	Abdelaziz CHEBBOUBI	Isomeric ratio measurements with the ILL Lohengrin spectrometer
		10:10-11:20	Junichi KATAKURA	Revision of the JENDL FP Fission Yield Data
		11:20-11:40	David REGNIER	Microscopic prediction of fission yields based on the time dependent GCM formalism
		11:40-12:00	Amanda PORTA	Total Absorption Spectroscopy of fission fragments relevant for reactor antineutrino spectra and decay heat calculation
Lunch (buffet)				
		13:00-17:30	Visit CEA-Cadarache facilities	
		19:30	Workshop Dinner	

Thursday October 8th, 2015

	Uncertainties and covariance matrices		
(Chair: D. Neudecker)	08:30-09:00	Helmut LEEB	Differential Cross Sections and the Impact of Model Defects in Nuclear Data Evaluation
	09:00-09:20	Oliver BUSS	NUDUNA/MOCABA - Improved PWR simulations by Monte-Carlo uncertainty analysis and Bayesian inference
	09:20-09:40	Sebastien LAHAYE	Comparison of deterministic and stochastic approaches for isotopic concentration and decay heat uncertainty quantification on elementary fission pulse
	09:40-10:00	Nicholas TERRANOVA	Covariance Generation Methodologies for Fission Product Yields
	10:00-10:20	Petter HELGESSON	New Ni-59 data including uncertainties and consequences for gas production in steel in LWR spectra
Coffee break			
	Fission Fragments Observables		
(Chair: O. Serot)	10:50-11:20	Diego RAMOS	Dependence of Fission-Fragment Properties On Excitation Energy For N-rich Actinides
	11:20-11:40	Esther LEAL-CIDONCHA	Fission fragment angular distribution measurements of 235U and 238U at n_TOF (CERN)
	11:40-12:00	Loic THULLIEZ	Sensitivity studies of spin cutoff and energy sharing models on fission fragment observables
Lunch (buffet)			
	End of the Workshop		

Posters

Ludovic MATHIEU	Development of a gaseous proton recoil detector for fission cross section measurement below $E_n=1\text{MeV}$
Leila YETTOU	Calculation of preequilibrium effects in neutron-induced cross section on ^{65}Cu using the EMPIRE 3.2 code
Cristiana OPREA	Neutron Induced Capture and Fission Processes on ^{238}U nucleus
Alexander AURES	Impact of nuclear data on sodium-cooled fast reactor calculations
Augusto HERNANDEZ-SOLIS	Development of a computational platform for the assessment of multi-group PN uncertainties associated to TENDL angular distributions
Manuela FRISONI	ANITA-2000 activation code package-updating of the decay data libraries and validation on the experimental data of 14 MeV Frascati Neutron Generator
Massimo PESCARINI	Validation of the BUGJEFF311.BOLIB, BUGENDF70.BOLIB and BUGLE-B7 Broad-Group Libraries on the PCA-Replica ($\text{H}_2\text{O}/\text{Fe}$) neutron shielding benchmark experiment
Gregory PERRET	Toward Reanalysis of the Tight-Pitch HCLWR-PROTEUS Phase II Experiments