



The Abdus Salam
International Centre for Theoretical Physics



Joint ICTP-IAEA Workshop on Nuclear Reaction Data for Advanced Reactor Technologies

Organizer(s): Directors: A. Mengoni, A. Stanculescu. Local Organizer: C. Tuniz
Trieste - Italy, 19 - 30 May 2008

Programme

Monday, 19 May 2008

- 08:30 - 10:00** (Room: Adriatico Guest House - Giambiagi Lecture Hall Area (Lower Level 1))
Registration and Administrative Formalities
- 10:00 - 10:30** --- Coffee break ---
- 10:30 - 12:00** **Welcome and Introduction by the Workshop Directors**
- 12:00 - 14:00** --- Lunch break ---
- 14:00 - 15:30** **A. Stanculescu / IAEA, Vienna, Austria**
Advanced Fast Reactors
- 15:30 - 16:00** --- Coffee break ---
- 16:00 - 17:30** **J. Grassberger/K. McLaughlin / ICTP, Trieste/IAEA, Vienna, Austria**
Introduction to computational facilities and computer software

Tuesday, 20 May 2008

- 08:30 - 10:00** **P. Schillebeeckx / EC-JRC-IRMM, Neutron Physics Unit, Geel, Belgium**
Cross Section Measurements and Uncertainties of Cross Section Data
- 10:00 - 10:30** --- Coffee Break ---

- 10:30 - 12:00** **N. Colonna** / *INFN, Sezione di Bari, Bari, ITALY*
Fission Measurements
- 12:00 - 14:00** --- Lunch Break ---
- 14:00 - 15:30** **J. Kendall** / *Global Virtual LLC, Prescott, USA*
High Temperature Advanced Reactors
- 15:30 - 16:00** --- Coffee Break ---
- 16:00 - 17:30** (Room: Adriatico Guest House Informatics Lab.)
P. Schillebeeckx / *EC-JRC-IRMM, Neutron Physics Unit, Geel, Belgium*
Exercises

Wednesday, 21 May 2008

- 08:30 - 10:00** **P. Schillebeeckx** / *EC-JRC-IRMM, Neutron Physics Unit, Geel, Belgium*
Cross Section Measurements and Uncertainties of Cross Section Data
- 10:00 - 10:30** --- Coffee Break ---
- 10:30 - 12:00** **N. Colonna** / *INFN, Sezione di Bari, Bari, ITALY*
Fission Measurements
- 12:00 - 14:00** --- Lunch Break ---
- 14:00 - 15:30** **J. Kendall** / *Global Virtual LLC, Prescott, USA*
High Temperature Advanced Reactors
- 15:30 - 16:00** --- Coffee Break ---
- 16:00 - 17:30** (Room: Adriatico Guest House Informatics Lab.)
P. Schillebeeckx / *EC-JRC-IRMM, Neutron Physics Unit, Geel, Belgium*
Exercises

Thursday, 22 May 2008

- 08:30 - 10:00** **N. Colonna/ P. Schillebeeckx** / *INFN, Sezione di Bari, Italy/EC-JRC-IRMM, Neutron Physics Unit, Geel, Belgium*
Capture Cross Section Measurements
- 10:00 - 10:30** --- Coffee Break ---
- 10:30 - 12:00** **A. Borella** / *EC-JRC-IRMM, Neutron Physics Unit, Geel, Belgium*
Cross Section Measurements and Uncertainties of Cross Section Data
- 12:00 - 14:00** --- Lunch Break ---
- 14:00 - 15:30** **V. Kuznetsov** / *IAEA, Vienna, Austria*
Small and Medium Sized Advanced Reactors
- 15:30 - 16:00** --- Coffee Break ---

16:00 - 17:30 (Room: Adriatico Guest House Informatics Lab.)
A. Borella / *EC-JRC-IRMM, Neutron Physics Unit, Geel, Belgium*
Exercises

Friday, 23 May 2008

08:30 - 10:00 **S. Marrone** / *INFN, Sezione di Bari, Italy*
Capture Cross Section Measurements

10:00 - 10:30 --- Coffee Break ---

10:30 - 12:00 **F. Gunsing** / *CEA Saclay, DSM / IRFU / SPHN, Gif-sur-Yvette, France*
Neutron Induced Resonance Reactions

12:00 - 14:00 --- Lunch Break ---

14:00 - 15:30 **V. Kuznetsov** / *IAEA, Vienna, Austria*
Small and Medium Sized Advanced Reactors

15:30 - 16:00 --- Coffee Break ---

16:00 - 17:30 (Room: Adriatico Guest House Informatics Lab.)
S. Marrone / *INFN, Sezione di Bari, Bari, ITALY*
Exercises

Monday, 26 May 2008

08:30 - 10:00 **P. Descouvemont** / *Université Libre de Bruxelles, Brussels, Belgium*
R-matrix theory of nuclear reactions

10:00 - 10:30 --- Coffee Break ---

10:30 - 12:00 **G. Palmiotti** / *Nuclear Science and Engineering Division, Idaho National Laboratory, USA*
Sensitivity and Uncertainty Analysis for the Neutronic Design of Advanced Nuclear Systems

12:00 - 14:00 --- Lunch Break ---

14:00 - 15:30 **B.P. Bromley** / *AECL, Chalk River, Canada*
Heavy Water Reactors

15:30 - 16:00 --- Coffee Break ---

16:00 - 17:30 (Room: Adriatico Guest House Informatics Lab.)
P. Descouvemont / *Université Libre de Bruxelles, Brussels, Belgium*
Exercises

Tuesday, 27 May 2008

08:30 - 10:00 **P. Descouvemont** / *Université Libre de Bruxelles, Brussels, Belgium*
R-matrix theory of nuclear reactions

- 10:00 - 10:30** --- Coffee Break ---
- 10:30 - 12:00** **G. Palmiotti** / *Nuclear Engineering Division, Argonne National Laboratory, USA*
Sensitivity and Uncertainty Analysis for the Neutronic Design of Advanced Nuclear Systems
- 12:00 - 14:00** --- Lunch Break ---
- 14:00 - 15:30** **B.P. Bromley** / *AECL, Chalk River, Canada*
Heavy Water Reactors
- 15:30 - 16:00** --- Coffee Break ---
- 16:00 - 17:30** (Room: Adriatico Guest House Informatics Lab.)
P. Descouvemont / *Université Libre de Bruxelles, Brussels, Belgium*
Exercises

Wednesday, 28 May 2008

- 08:30 - 10:00** **S. Hilaire** / *CEA, Centre DAM - Ile de France, Arpajon, France*
Statistical Modeling and Calculation
- 10:00 - 10:15** --- Coffee Break ---
- 10:15 - 13:15** **Group visit to Elettra**
- 13:15 - 14:00** --- Lunch Break ---
- 14:00 - 15:30** **Students' presentations**
- 15:30 - 16:00** --- Coffee Break ---
- 16:00 - 17:30** (Room: Adriatico Guest House Informatics Lab.)
S. Hilaire / *CEA, Centre DAM - Ile de France, Arpajon, France*
Exercises

Thursday, 29 May 2008

- 08:30 - 10:00** **S. Hilaire** / *CEA, Centre DAM - Ile de France, Arpajon, France*
Statistical Modeling and Calculation
- 10:00 - 10:15** --- Coffee Break ---
- 10:15 - 13:15** **Group visit to Elettra**
- 13:15 - 14:00** --- Lunch Break ---
- 14:00 - 15:30** **Students' presentations**
- 15:30 - 16:00** --- Coffee Break ---
- 16:00 - 17:30** (Room: Adriatico Guest House Informatics Lab.)
S. Hilaire / *CEA, Centre DAM - Ile de France, Arpajon, France*
Exercises

Friday, 30 May 2008

08:30 - 10:00 **A. Mengoni / IAEA, Vienna, Austria**
Nuclear Data Libraries: Where? How?

10:00 - 10:30 --- Coffee break ---

10:30 - 12:00 **Open Discussion**

12:00 - 14:00 --- Lunch break ---

14:00 - 15:30 **Students' presentations**

15:30 - 16:00 --- Coffee break ---

16:00 - 17:30 **Closing session**