



The Abdus Salam  
**International Centre  
for Theoretical Physics**

## Joint ICTP-IAEA Advanced Workshop on Model Codes for Spallation Reactions

Organizer(s): Directors: G. Mank, D. Filges, S. Leray, Y. Yariv. Local Organizer: C. Tuniz  
Trieste - Italy, 04 - 08 February 2008

**Venue: Adriatico Guest House Giambiagi Lecture Hall**

### Final programme

**Monday, 4th February, INC Models** (Room:Adriatico Guest House Giambiagi Lecture Hall)  
**Chairperson: G. Mank**

**4 February 2008**

- 08:30 - 09:45** (Room: Adriatico Guest House (Lower Level 1))  
**Registration and Administrative formalities**
- 09:45 - 10:30** **D. Filges** / *Forschungszentrum Juelich GmbH, Germany*  
**Introduction and Aim of the Meeting**
- 10:30 - 11:00** (Room: Adriatico Guest House (Lower Level 1))  
--- Coffee Break ---
- 11:00 - 12:30** **Y. Yariv** / *Soreq, Israel*  
**ISABEL - INC Model for High-Energy Hadron-Nucleus Reactions**
- 12:30 - 14:00** (Room: Adriatico Guest House Cafeteria)  
--- Lunch Break ---
- 14:00 - 15:30** **A. Boudard** / *CEA, France*  
**Detailed description of the Intra Nuclear Cascade from Liege: INCL4**
- 15:30 - 16:00** (Room: Adriatico Guest House (Lower Level 1))  
**Coffee Break**
- 16:00 - 18:00** General Meeting:  
**Spallation Data and Applications, A. Mengoni, A. Stanculescu, I.A.E.A. Goals of the intercomparison**

19:15 - 21:15 (Room: Adriatico Guest House Cafeteria)  
--- Official Reception ---

**Tuesday, 5th February INC/PE Models** (Room:Adriatico Guest House Giambiagi Lecture Hall)  
**Chairperson: S. Leray**

5 February 2008

09:00 - 10:30 **S. Mashnik / LANL, USA**  
**CEM03.03 and LAQSM03.03 Event Generators for MCNP6, MCNPX and MARS15**

10:30 - 11:00 (Room: Adriatico Guest House (Lower Level 1))  
--- Coffee Break ---

11:00 - 12:30 **A. Ferrari / CERN, Geneva, Switzerland**  
**Models in FLUKA**

12:30 - 14:00 (Room: Adriatico Guest House Cafeteria)  
--- Lunch Break ---

14:00 - 15:00 **Z. Rudy / Jagiellonian University, Cracow, Poland**  
**Proton induced spallation reactions investigated within the framework of BUU model**

15:00 - 15:30 **Discussion of Intercomparison**

15:30 - 16:00 (Room: Adriatico Guest House (Lower Level 1))  
--- Coffee Break ---

16:00 - 18:00 (Room: Adriatico Guest House Informatics Lab.)  
Expert Meeting on Intercomparison:  
**Choice of experimental data (including Neutron Data)**

20:30 - 21:45 **Discussion**

**Wednesday, 6th February QMD Models** (Room:Adriatico Guest House Giambiagi Lecture Hall)  
**Chairperson: D. Filges**

6 February 2008

09:00 - 10:30 **C. Hartnack / Subatech, France**  
**The Description of Nuclear Collision within the Quantum Molecular Dynamics Model**

10:30 - 11:00 (Room: Adriatico Guest House (Lower Level 1))  
--- Coffee Break ---

11:00 - 12:30 **K. Niita / RIST, Japan**  
**Nuclear Reaction Models (JAM and JQMD) in PHITS**

12:30 - 14:00 (Room: Adriatico Guest House Cafeteria)  
--- Lunch Break ---

14:00 - 14:45 **F. Goldenbaum / Forschungszentrum Julich GmbH, Germany**  
**Experimental data on evaporation and pre-equilibrium emission in GeV p-induced spallation reactions**

**14:45 - 15:30**     **J. Benlliure** / *University of Santiago de Compostela, Spain*  
**Detailed investigation of Residual Nuclei Produced in Spallation Reactions at GSI**

**15:30 - 16:00**     (Room: Adriatico Guest House (Lower Level 1))  
--- Coffee Break ---

**16:00 - 16:15**     **M. Nandy** / *Saha Inst. of Nuclear Physics, Kolkata, India*  
**QMD Approach to Spallation Reactions**

**16:15 - 18:00**     (Room: Adriatico Guest House Informatics Lab.)  
**Expert meeting on Intercomparison: Figures of merit**

**Thursday, 7th February De-excitation Models** (Room:Adriatico Guest House Giambiagi Lecture Hall)  
**Chairperson: S. Mashnik**

**7 February 2008**

**09:00 - 10:30**     **A. Botvina** / *INR, Russia*  
**The Role of Multifragmentation in Spallation Reactions**

**10:30 - 11:00**     (Room: Adriatico Guest House (Lower Level 1))  
--- Coffee Break ---

**11:00 - 12:00**     **R. Charity** / *Washington Univ. in St. Louis, USA*  
**GEMINI: Dexcitation of excited compound nuclei through a series of binary decays**

**12:00 - 12:15**     **A. Galoyan** / *JINR, Dubna, Russian Federation*  
**Multiplicity fluctuations in interactions of light nuclei with carbon nuclei at momentum of 4.2 GeV/c per nucleon and their theoretical interpretation.**

**12:15 - 12:30**     **Discussion**

**12:30 - 14:00**     (Room: Adriatico Guest House Cafeteria)  
--- Lunch Break ---

**14:00 - 14:45**     **Y. Titarenko, V. Batyaev** / *ITEP, Russia*  
**ITEP experiments with thin targets irradiated by upto 2.6 GeV protons**

**14:45 - 15:30**     **R. Michel** / *Univ. of Hannover, Germany*  
**Experimental Cross Sections for the Production of Residual Nuclides at Medium Energies: Status, Recent Progress and Challenges for Modeling**

**15:30 - 16:00**     (Room: Adriatico Guest House (Lower Level 1))  
--- Coffee Break ---

**16:00 - 18:00**     (Room: Adriatico Guest House Informatics Lab.)  
**Expert meeting on Intercomparison:**  
**Data and results format, General Discussion**

**Friday, 8th February De-excitation Models** (Room:Adriatico Guest House Giambiagi Lecture Hall)  
**Chairperson: Y. Yariv**

**8 February 2008**

**09:00 - 10:30**     **K. H. Schmidt** / *GSI, Germany*  
**The de-excitation code ABLA07**

- 10:30 - 11:00** (Room: Adriatico Guest House (Lower Level 1))  
--- Coffee Break ---
- 11:00 - 12:30** **S. Leray / CEA, France**  
**Summary and perspectives (intercomparison description)**
- 12:30 - 14:00** (Room: Adriatico Guest House Cafeteria)  
--- Lunch Break ---
- 14:00 - 16:00** **Closed Session (Report)**