

ECT* Program: Statistical properties of nuclei

Dates: July 11 - July 15, 2016

Website: <http://www.ectstar.eu/node/1662>

Monday, July 11: Experiments

8:45 - 9:30 Registration

9:30 - 10:00 S. Siem: Statistical properties of warm nuclei

10:00 - 10:30 P. von Neumann-Cosel: Gamma strength functions and level densities from high-resolution proton scattering

10:30 - 11:00 Coffee break

11:00 - 11:30 A. Richter: Magnetic dipole scissor and spin-flip modes

11:30 - 12:00 A. Voinov: Level densities from particle evaporation spectra

12:00 - 12:30 A. Zilges: Nuclear structure close to the threshold – pygmy dipole resonances

12:30 - 2:00 Lunch at ECT*

3:00 - 3:30 Discussion: workshop goals

3:30 – Posters

4:30 - 5:00 Coffee

Tuesday, July 12: Experiments (continued); Level densities I

9:00 - 9:30 A.-C. Larsen: The beta-Oslo method – level densities and gamma strength functions in neutron-rich nuclei

9:30 - 10:00 S. Goriely: Microscopic description of nuclear level densities for practical applications

10:00 - 10:30 L. Moretto: Level densities and angular momentum

10:30 - 11:00 Coffee break

11:00 - 11:30 S. Åberg: Combinatorial level densities

11:30 - 12:00 Th. Døssing: Combinatorial level densities (continued)

12:30 - 2:00 Lunch at ECT*

4:30 - 5:00 Coffee

Wednesday, July 13: Level densities II

9:00 - 9:30 M. Horoi: Moment method for nuclear level densities and applications to nuclear reactions

9:30 - 10:00 Y. Alhassid: Level densities by the auxiliary-field Monte Carlo method

10:30 - 11:00 Coffee break

11:00 - 11:30 T. Kawano: Sensitivity to level densities in the Hauser-Feshbach theory

11:30 - 12:00 S. Grimes: Deformation effects in Hauser-Feshbach calculations

12:30 - 2:00 Lunch at ECT*

3:00 – Discussion: level densities

4:30 - 5:00 Coffee

Thursday, July 14: Gamma strength functions

9:00 - 9:30 P. Ring: Collective excitations in nuclei in the covariant density functional theory

9:30 - 10:00 E. Litvinova: Damping of collective excitations

10:00 - 10:30 R. Firestone: ^{57}Fe gamma decay schemes as a benchmark

10:30 - 11:00 Coffee break

11:00 - 11:30 B. A. Brown: Configuration-interaction results for $M1$ strength functions

11:30 - 12:00 R. Schwengner: Low-energy $M1$ strength from shell model calculations

12:00 - 12:30 K. Sieja: Dipole strength functions from large-scale shell model for medium mass nuclei

12:30 - 2:00 Lunch at ECT*

3:00 – Discussion: gamma strength functions

4:30 - 5:00 Coffee

Friday, July 15: Brink-Axel hypothesis and fluctuations

9:00 - 9:30 C.W. Johnson: Systematics of strength functions and the Brink-Axel hypothesis

9:30 - 10:00 M. Guttormsen: On the validity of the Brink-Axel hypothesis

10:00 - 10:30 M. Krtička: Fluctuations of neutron resonance widths

10:30 - 11:00 Coffee break

11:00 - 11:30 H.A. Weidenmüller: Neutron widths and the Porter-Thomas distribution

11:30 - 12:00 S. Frauendorf: Statistical characteristics of low-energy magnetic radiation

12:00 - 12:30 V. Zelevinsky: Statistics of thermalization in a small system

12:30 - 2:00 Lunch at ECT*

3:00 - 4:00 Discussion: fluctuations

4:00 – G.F. Bertsch: Summary of workshop