

Programme of the 18th Nuclear Physics Workshop

[Version: 27.09.2011]

Wednesday, 28th September

16.45–17.00 Coffe-break

17.00–17.15 Openning of the workshop

17.15–18.00 J. Dudek, Predictive power of nuclear theories - Link with Experiment

18.00–19.00 Dinner

19.20–20.00 P. Ring, Covariant density functional theory for excited states in nuclei

20.20–24.00 Welcome reception

Thursday, 29th September

08.00–08.45 Breakfast

Morning Session: Fission, Fusion and Decay

09.15–09.55 H. Krappe, Theory of nuclear fission

09.55–10.30 N. Carjan, Non-adiabatic transition of the fissioning nucleus at scission:
the time scale

10.30–10.50 Coffe-break

10.50–11.30 J. Kvasil, Nuclear vorticity and general treatment of vortical, toroidal,
and compression modes

11.30–12.05 P. Quentin, Further microscopic studies of fission barriers for heavy
nuclei

12.05–12.40 K. Siwek-Wilczyńska, Predictions of the FBD model for the synthesis
cross sections of $Z=114-120$ elements based on macroscopic-microscopic
fission barriers

13.00–14.00 Lunch

Afternoon session: Fission, Fusion and Decay

- 16.00–16.30 D. Boilley, Fusion hindrance and super-heavy elements
- 16.30–16.50 Coffe-break
- 16.50–17.20 M. Kowal, Whether or not topographic theorem is fulfilled in the superheavy nuclei ?
- 17.20–17.50 D. Poenaru, Competition of alpha decay and heavy particle decay in superheavy nuclei
- 17.50–18.20 K. Hadyńska-Klęk, Coulomb excitation of the ^{42}Ca with AGATA Demonstrator
- 18.20–18.50 I. Skwira-Chalot, Neutron enrichment of the neck-originated intermediate mass fragments in predictions of the QMD model
- 19.30–24.00 Barbecue

Friday, 30th September

08.00–08.45 Breakfast

Morning session: Nuclear structure

- 08.45–09.20 A. Sobczewski, Quality of description of heavy-nuclei masses by various models
- 09.20–09.55 F. Ivanyuk, The shape transitions in rotating nuclei
- 09.55–10.30 J. Skalski, Super-oblate superheavy nuclei, mean-field results
- 10.30–10.50 Coffe-break
- 10.50–11.30 X. Vinyes, Symmetry energy in bulk matter from neutron skin thickness in finite nuclei
- 11.30–12.05 K. Bennaceur, Nuclear response for the Skyrme functional with zero-range tensor
- 12.05–12.40 I. Ushakov, Deformation parameters of the 2s1d-shell nuclei in bound states
- 13.00–14.00 Lunch

Afternoon session: Nuclear structure

- 16.00–16.20 Coffe-break
- 16.20–17.05 A. Afanasjev, Recent progress in the study of fission barriers in covariant density functional theory
- 17.05–17.40 H. Molique, About symetries and microscopic origin of the nuclear mean field
- 17.40–18.15 N. Minkov, Nuclear alternating-parity bands and transition rates in a model of coherent quadrupole-octupole motion
- 18.15–18.50 J. Bartel, Light particle emission from deformed hot rotating nuclei
- 19.00–20.00 Dinner

Saturday, 1st October

08.00–08.45 Breakfast

Morning session: Miscellanea

- 09.00–09.40 K.Pomorski, Dynamic coupling of rotation with the pairing field in heavy nuclei
- 09.40–10.00 A. Dobrowolski, Problem of symmetrization in a quadrupole-octupole collective approach
- 10.00–10.30 A. Gózdź, Generator coordinate method and symmetries
- 10.30–10.50 Coffe-break
- 10.50–11.10 L. Próchniak, Collective properties of stable even-even Cd isotopes
- 11.10–11.40 A. Magner, [J. Błocki], Statistics of the single-particle levels
- 11.40–12.10 M. Gózdź, Supersymmetric Higgs bosons and the LHC
- 12.10–12.40 J. Yao, Impurity effect of lambda hyperon in collective excitation of atomic nuclei
- 13.00–14.00 Lunch

Afternoon session: Single-particle vs collective motion

16.00–16.30 S. Aberg, Pairing and chaos

16.30–16.50 Coffe-break

16.50–17.20 A. Magner, Gross-shell effects in the dissipative nuclear dynamics

17.20–17.50 B. Bally, Multi-reference energy density functional calculations for odd-A nuclei

17.50–18.20 M. Mirea, Configuration mixing and dissipation from the time dependent pairing

18.20–18.30 Closing of the workshop

20.00–24.00 Conference dinner

Sunday, 2nd October

08.30–09.30 Breakfast

09.30–13.00 Excursion

13.00–13.45 Lunch