

30th Nuclear Physics Workshop

23-28 September 2024

Kazimierz Dolny, Poland

MONDAY

17.00 - 19.00 REGISTRATION

19.00 - 20.00 DINNER

OPENING LECTURE

20.00 - 21.00

15 Welcome Address

45 Marek Gózdź Time as a quantum observable

21.00 - 22.00 WELCOME RECEPTION

TUESDAY

8.00 - 9.00 BREAKFAST

FISSION

9.00 - 10.30

30 Nicolas Schunck Predicting initial conditions of fission fragments

30 Nathalie Pillet Description of fission process including intrinsic excitations

30 Tamara Nikšić Microscopic models of induced fission dynamics

COFFEE BREAK

11.00 - 12.40

30 Karl-Heinz Schmidt Evidence for inertial dynamics in fission

30 Michał Kowal Entropies, level-density parameters and fission probabilities along the triaxially- and axially-symmetric fission paths in ^{296}Lv

20 Bo Li Generalized time-dependent generator coordinate method for fission dynamics

20 Yang Su Fission study based on Fourier deformation parameters

13.00 - 14.00 LUNCH

FUSION

16.00 - 17.00

30 Sven Åberg Formation of superheavy nuclei

30 Tomasz Cap Synthesis of new superheavy nuclei in reactions of ^{50}Ti , ^{51}V , and ^{54}Cr beams with actinide targets

COFFEE BREAK

17.30 - 18.20

30 Yannen Jaganathen Demystifying the fusion mechanism in heavy ion collisions within six-dimensional Langevin dissipative dynamics

20 Aleksander Augustyn Further Insights into Hindrance in Cold Fusion Reactions of Superheavy Elements

19.00 - 20.00 DINNER

WEDNESDAY

8.00 - 9.00 BREAKFAST

MODELS

9.00 - 10.30

- 30 Peter Ring On the way of an ab-initio derivation of Covariant Density Functionals
- 30 Guillaume Blanchon Beyond Woods-Saxon and Perey-Buck paradigms from microscopic grounds
- 30 Petar Marević Re-Quantizing Nuclear Motion: A New Configuration-Mixing Model of Nuclear Dynamics

COFFEE BREAK

11.00 - 12.20

- 30 Luis Robledo Odd mass nuclei and multi-quasiparticle excitations with the Gogny force
- 30 Wen Hui Long Extension of the relativistic Hartree-Fock theory for unstable nuclei
- 20 Nathanael Kontowicz Gallagher-Moszkowski splitting within the Skyrme energy-density functional

13.00 - 14.00 LUNCH

REACTIONS

16.30 - 17.00

- 30 Jie Meng Theoretical wonder for New Facilities with Rare Isotope Beams

COFFEE BREAK

17.30 - 18.40

- 30 Indranil Mazumdar Probing Dynamics of Fusion-Fission Process in Heavy to very Heavy Nuclei
- 20 Katarzyna Mazurek Nuclear processes in photon induced ultrarelativistic reactions
- 20 Maciej Konieczka Theoretical prediction on double beta decay matrix elements within symmetries-restored density functional theory

19.00 - 21.00 DINNER

THURSDAY

8.00 - 9.00 BREAKFAST

STRUCTURE

9.00 - 10.20

30 Dieter Ackermann Probing SHN structure and stability - high-K states and the odd nucleon

30 Rui Han Two-body currents in magnetic dipole moments based on nuclear DFT

20 Nikita Bernier Establishing the deformation characteristics of ^{66}Ge

COFFEE BREAK

11.00 - 12.30

30 Magda Zielińska Experimental studies of shape coexistence in Zr nuclei

20 Ozge Aktas First observation of γ - ray transitions in ^{111}Mo

20 Artur Dobrowolski Properties of octupole-deformed ^{226}Ra nucleus within a consistent collective approach

20 Houda Naïdja Theoretical progress in the investigation of the ^{132}Sn mass region

13.00 - 14.00 LUNCH

DYNAMICS

16.30 - 17.00

30 Xiaojun Bao ~~Study on the dynamical mechanism of multinucleon rearrangement in low energy heavy ion collisions~~

30 Piotr Magierski Nuclear dynamics in the framework of time-dependent density functional theory with pairing correlations.

COFFEE BREAK

17.30 - 18.30

30 Yifei Niu A novel way to study nuclear giant resonances

30 Jan Kvasil Possible pygmy resonance above excited states

19.00 - 22.00 BARBEQUE

FRIDAY

8.00 - 9.00 BREAKFAST

POLISH - FRENCH COLLABORATION ANNIVERSARY

Chair: Adam Maj

9.00 - 10.40

- 10 Adam Maj Welcome from COPIN
- 30 Marcella Grasso Opening talk: 1974-2024: 50 years of joint projects within the COPIN Polish-French agreement
- 30 Bogdan Fornal The COPIGAL Collaboration
- 30 Krzysztof Pomorski Isotopic fragment properties in spontaneous and fusion-induced fission within a Langevin model

COFFEE BREAK

11.10 - 12.40

- 30 Marek Płoszajczak Nuclear clustering - from the edge of stability to the Fermi energy domain
- 30 Jonathan Wilson New Fission Studies with nu-Ball2/PARIS
- 30 Michał Ciemala Highlights from the PARIS experiments in France and in Poland

13.00 - 14.00 LUNCH

POLISH - FRENCH COLLABORATION ANNIVERSARY

Chair: Christelle Schmitt

15.00 - 16.30

- 30 Johann Bartel High K isomers as a stringent test of an effective interaction
- 30 Irene Dedes Exotic Shapes and Symmetries of Atomic Nuclei: Overview and Perspectives
- 30 Katarzyna Hadyńska-Klęk Coulomb excitation of (exotic) nuclei - projects conducted within the Polish-French collaboration over the past decades

COFFEE BREAK

17.00 - 18.30

- 30 Hervé Moliqeu Shape-isomers in the Pt-Hg-Pb region
- 30 Béatrice Ramstein HADES experiments at GSI
- 30 Cyprian Mieszczyski Modeling of Radiation-Induced Effects in Nuclear Materials

20.00 - 24.00 CONFERENCE DINNER

SATURDAY

8.00 - 9.00 BREAKFAST