

## IWNT39, 3 – 9 July 2022, PROGRAMME

### Monday, 4 July

#### *Morning session*

09:30 - 9:45 *Opening*

09:45 - 10:15 **D. Bonatsos**: “Islands of shape coexistence in proxy-SU(3) symmetry and in covariant density functional theory”

10:15 - 10:45 **P. Das**: “Polarization-directional correlation of gamma rays in spectroscopic investigation of nuclei”

10:45 - 11:15 *Coffee*

11:15 - 11:45 **J. Dudek** (remote): “New Directions in Nuclear Spectroscopy: Research of Exotic Point-Group Symmetries”

11:45 - 12:15 **V. Nesterenko** (remote): “Isoscalar giant monopole resonance in prolate  $^{24}\text{Mg}$  and oblate  $^{28}\text{Si}$ : effect of IS0/IS2 coupling”

12:15 - 12:45 **E. Suraud** (remote): “On the stability of hole states in molecules and clusters, a generic mechanism?”

#### *Afternoon session*

16:00 - 16:30 *Coffee*

16:30 - 17:00 **M. Hadizadeh** (remote): “A new form of Faddeev equations for three-body bound states”

17:00 - 17:30 **P. Georgoudis**: “Conformal symmetry, unitary limit and the collective nuclear states”

17:30 - 18:00 **N. Minkov**: “Nuclear metastability at different energy scales”

18:00 - 18:30 **H. Mittal**: “Systematics of flat superdeformed bands”

18:30 - 19:00 **A. Lahbas** (remote): “Description of the gamma-unstable nuclei within deformation dependent mass and energy-dependent Davidson potential formalisms”

## Tuesday, 5 July

### *Morning session*

- 09:30 - 10:00 **Q. Fable** (remote): “N-Z asymmetry effects on the nuclear equation of state”
- 10:00 - 10:30 **M. Gaidarov**: “An alternative approach within the CDFM for studies of nuclear symmetry energy components and their ratio”
- 10:30 - 11:00 **P. Papakonstantinou** (remote): “Density dependence of the nuclear symmetry energy within the KIDS framework”
- 11:00 - 11:30 *Coffee*
- 11:30 - 12:00 **C. Moustakidis** (remote): “The third family of compact objects as a tool to constrain the nuclear equation of state”
- 12:00 - 12:30 **A. Rahmatinejad**: “Level densities and survival probabilities of heaviest nuclei”
- 12:30 - 13:00 **M. El Adri** (remote): “Study of structural and decay properties of even-even Pb isotopes”

### *Afternoon session*

- 15:30 - 16:00 *Coffee*
- 16:00 - 16:30 **J. Gonzalez**: “The SuSAv2 model for inelastic neutrino-nucleus scattering”
- 16:30 - 17:00 **M. Ivanov**: “Neutral current quasielastic (anti)neutrino scattering beyond the Fermi gas model at MiniBooNE and BNL kinematics”
- 17:00 - 17:30 **A. Mennana** (remote): “Giant dipole resonance in Sm isotopes with TDHF”
- 17:30 - 18:00 **Z. Stoyanov**: “Fast numerical calculations of the equation of state of magnetar outer crust”
- 18:00 - 18:30 **Y. Mutafchieva**: “Composition and unified equation of state of magnetar crusts-influence of the magnetic field”
- 18:30 - 19:00 **N. Firdous** (remote): “Prediction of Monte Carlo Event Generator to probe the shower implementation”(talk), “Phenomenological study of impact parameter dependence” (poster)

## Wednesday, 6 July

### *Morning session*

- 09:30 - 10:00 **V. Karmanov**: “Systems dominated by exchange particles”
- 10:00 - 10:30 **N. Buyukcizmeci** (remote): “Disintegration of nuclei in high energy reactions”
- 10:30 - 11:00 **D. Petrellis**: “Study of  $K^+\Sigma^-$  photoproduction using an isobar model and statistical learning techniques”
- 11:00 - 11:30 *Coffee*
- 11:30 - 12:00 **S. Gautam** (remote): “Neutron-proton asymmetry effects in far Fermi energy region”
- 12:00 - 12:30 **S. Chopra** (remote): “Theoretical speculation of unobserved decay channels for super-heavy elements using the Dynamical Cluster-decay Model”
- 12:30 - 13:00 **S. Akkoyun** (remote): “Plasma shielding effects on nuclear spectra: applications on two valence particle systems in *sd* shell”

### *Afternoon session*

- 15:30 - 16:00 *Coffee*
- 16:00 - 16:30 **N.K. Dhillon** (remote): “Effect of momentum dependent interactions on the energy of onset of vaporization”
- 16:30 - 17:00 **A. Afanasjev** (remote): “Improving energy density functionals in particle-particle and particle-hole channels”
- 17:00 - 17:30 **K. Drumev**: “Recent progress in the universal microscopic algebraic shell-model approach development for the description of collective states in light and medium-mass nuclei”
- 17:30 - 18:00 **F. Sammarruca** (remote): “The equation of state of neutron-rich matter at fourth order of chiral effective field theory and the radius of a medium-mass neutron star”
- 18:00 - 18:30 **R. Machleidt** (remote): “Alternative facts in microscopic nuclear structure”
- 18:30 - 19:00 **I. Petrov**: “Giorgio Parisi - *ma non troppo* steps to Nobel prize”
- 20:00 **OFFICIAL DINNER**

## Thursday, 7 July

### *Morning session*

- 09:30 - 10:00 **P. Kostryukov**: “Study of low-energy fission actinide-nuclei with Fourier shape parametrization”
- 10:00 - 10:30 **A. Kanakis-Pegios** (remote): “The effect of temperature on the tidal deformability of neutron stars”
- 10:30 - 11:00 **F. Lassiaille** (remote): “Discrete relativity”
- 11:00 - 11:30 *Coffee*
- 11:30 - 12:00 **D. Arora** (remote): “Study of fission dynamics of  $^{213, 215, 217}\text{Fr}$  formed in heavy-ion induced reaction”
- 12:00 - 12:30 **Y. El Bassem** (remote): “Shape Evolution in Pt isotopes within the covariant density functional theory”
- 12:30 - 13:00 **S. Dimitrova**: “Shell model corrections to proton induced pre-equilibrium reactions calculations”

### [EXCURSION](#)

## Friday, 8 July

### *Morning session*

- 09:30 - 10:00 **R. Rana** (remote): “A systematic study of nuclear stopping and various observables which reflect the degree of thermalization”
- 10:00 - 10:30 **G. Deyanova**: “A review on the gas sector in Bulgaria: structure and some comprehensive analysis”
- 10:30 - 11:00 **A. Kozlovskiy**: “Simulation of radiation damage processes caused by cosmic radiation in telluride glasses”
- 11:00 - 11:30 *Coffee*
- 11:30 - 12:00 **R. Kumar** (remote): “The investigation of even-even Pd nuclei with the help of cubic terms formed by Casimir Invariant Operators using IBM-1”
- 12:00 - 12:30 **P. Jain** (remote): “Computation of unknown spins of  $^{192}\text{Hg}$  superdeformed band”
- 12:30 - 13:00 **M. Imran** (remote): “Strangeness in hybrid neutron stars”

*Afternoon session*

14:30 -15:00 *Coffee*

15:00 -15:30 **Y. Kumar** (remote): “Thermodynamics of QGP in the early universe”

15:30 -16:00 **R. Mahajan** (remote): “Study of flow and their fragments”

16:00 -16:30 **S. Kaliraman** (remote): “Interference effects in breakup reaction of exotic nuclei”

16:30 -16:40 *Closing*