





HINPw6 Workshop Schedule

14th May 2021 (Day 1)

14:00-14:15	Opening Comments Ioannis Emmanouil - Dean of the School of Natural Sciences Christianna Mitsopoulou - Chair of the Chemistry Department Andreas Koutselos - Director of the Physical Chemistry Laboratory
14:15-15:00	Nicolas Alamanos The societal impact of nuclear physics

Session 1 - Nuclear Structure

Chairs: Dennis Bonatsos / Georgios Lalazissis

	Peter Ring
15:00-15:30	Relativistic Brueckner-Hartree-Fock Theory in Nuclear Matter and Finite Nuclear Systems
15:20 16:00	Nils Paar
15:30-16:00 16:00-16:30 16:30-17:00	Nuclear magnetic transitions in the relativistic energy density functional approach
16:00 16:30	Costel Petrache
10.00-10.50	Chirality and wobbling in nuclei: new achievements and perspectives
16:30 17:00	Nikolay Minkov
10.30-17.00	Shape and electromagnetic properties of the ^{229m} Th isomer
17:00-17:20	Dennis Bonatsos
17.00-17.20	Connecting the proxy-SU(3) symmetry to the shell model
17.20 17.40	Andriana Martinou
17:20-17:40	The islands of shape coexistence within the Elliott and the proxy-SU(3) models

17:40-18:00	Smaragda Sarantopoulou
	Highest weight irreducible representations favored by nuclear forces within SU(3)-symmetric fermionic systems
10.00 10.00	Vaia Prassa
18:00-18:20	Shape evolution of Hg isotopes within the covariant density functional theory
18:20-19:00	Break

Session 2 - Advances in Nuclear Facilities

Chair: Nikolaos Nicolis

19:00-19:30	James Kolata
19.00-19.30	Weak Interaction Physics at TwinSol
19:30-20:00	Sherry Yennello
19.30-20.00	Advancing Research in Texas through Experiments in Medical Isotope Science
20:00-20:30	Ivan Stekl
20.00-20.30	Neutrino Physics and dark matter at IEAP CTU Prague
	Manuela Cavallaro
20:30-21:00	Upgrade of the MAGNEX spectrometer toward the high-intensity phase of NUMEN
21.00 21.20	Patrick O'Malley
21:00-21:30	Current scientific efforts at the Nuclear Science Laboratory

15th May 2021 (Day 2)

Session 1 - Nuclear Reactions

Chair: Georgios Souliotis

14:00-14:30	Francesco Cappuzzello
14.00-14.30	Heavy-ion induced quasi-elastic reactions in view of the NUMEN project
44.00.44.50	Onoufrios Sgouros
14:30-14:50	Study of the one-proton transfer reaction in the $^{18}O + ^{48}Ti$ collision at 275 MeV
	Ismael Martel
14:50-15:20	Low energy reactions of halo nuclei

	Manuela Rodríguez-Gallardo
15:20-15:50	Reaction dynamics of exotic and stable weakly-bound nuclei using a four-body continuum-discretized coupled-channels formalism
15:50-16:20	Jesús Casal
15.50-10.20	Linking structure and dynamics with two-neutron halos
16:20-16:40	Athina Pakou
10.20-10.40	Searching for "treasures" at deep sub-barrier energies: The ⁸ B and ⁷ Be case
16:40-17:00	Vasileios Soukeras
10.40-17.00	Study of ⁴ He(⁴ He, ⁴ He) ⁴ He* inelastic scattering at the MAGNEX facility
17:00-17:30	Vlasios Petousis
17:00-17:30	Chasing the X17 Boson – Theory and Experiments
17:30-17:50	Victor Iacob
17.30-17.50	Precise branching ratio measurement for the superallowed β decay of $^{34}\mbox{Ar}$
17:50-18:30	Break

Session 2 - Astrophysics

Chair: Charalampos Moustakidis

18:30-19:00	Joseph Natowitz
	Employing ternary fission as a probe of low density nuclear matter
19:00-19:30	Aldo Bonasera Calculation of the ¹² C+ ¹² C sub-barrier fusion cross section in an imaginary time-dependent mean field theory
19:30-20:00	Agatino Musumarra From Nuclear Astrophysics to Fundamental Nuclear Physics: challenging experimental approaches at n_TOF (CERN)
20:00-20:30	Georgios Perdikakis Experimental constraints on reaction rates relevant to the radiogenic heating of planets
20:30-21:00	Angel Miguel Sanchez Benitez Spectroscopy of key nuclei in astrophysics by beta-delayed proton emission

	Luis Acosta
21:00-21:30	The AMS technique as an important tool for the measurement of astrophysical cross sections
	Polychronis Koliogiannis
21:30-21:45	Thermal properties of hot and dense matter: Influence of rapid rotation on protoneutron stars, hot neutron stars, and neutron star merger remnants
	Alkiviadis Kanakis-Pegios
21:45-22:00	Constraints on the speed of sound of dense nuclear matter through the tidal deformability of neutron stars
22:00 22:45	Arsenia Chorozidou
22:00-22:15	Momentum dependent mean-fields of hyperons & antihyperons

16th May 2021 (Day 3)

Session 1 - Flash Talks

Chair: Athina Pakou

	Theodosia Giamouki
15:30-15:35	Constraining the neutron star equation of state via gamma ray burst remnants and gravitational wave radiation
	Themistoklis Deloudis
15:35-15:40	Twin neutron stars: probe of phase transition from hadronic to quark matter
15:40-15:45	Vasileios Soukeras
15.40-15.45	Low energy proton induced reactions for application purposes
	Onoufrios Sgouros
15:45-15:50	Study of the neutron induced radiation background at the MAGNEX facility via FLUKA simulations
15:50-16:00	Break

Session 2 - Heavy-Ion Reactions and Rare Isotope Production Chair: Theodoros Gaitanos

16:00-16:30	Hua Zheng
	Connecting the NEoS to the interplay between fusion and quasi-fission processes in low-energy nuclear reactions

16:30-16:50	Nikolaos Nicolis
10:30-10:50	Two-stage description of ⁵⁶ Fe+p spallation reactions at 0.3-1.5 GeV/A
	Georgios Souliotis
16:50-17:10	Recent developments in the study of peripheral collisions below the Fermi Energy
	Olga Fasoula
17:10-17:25	Studies of multinucleon transfer in peripheral collisions of with ¹²⁴ Sn, ¹¹² Sn at 15 MeV/nucleon
	Stergios Koulouris
17:25-17:40	Studies of peripheral heavy-ion reactions with the MAGNEX spectrometer for the production of neutron-rich isotopes
	Konstantina Palli
17:40-17:55	Microscopic dynamics description of multinucleon transfer in peripheral collisions of ⁴⁰ Ar with ⁶⁴ Ni, ⁵⁸ Ni at 15 MeV/nucleon
	Theodoros Depastas
17:55-18:10	Constrained Fermionic Dynamics of Nuclear Systems: Near Ground State Properties and the Isospin Symmetry
18:10-18:40	Walter Loveland
10.10-10.40	Total kinetic energy release in the fast neutron induced fission of actinide nuclei
18:40-19:00	Break

Session 3 - Applications

Chair: Georgios Souliotis

19:00-19:20	Ninel Nica
10.00 10.20	Texas A&M US Nuclear DATA Program
10:20 10:50	Marcia Rodrigues
19:20-19:50	A novel approach to medical radioisotope production using inverse kinematics
40.50 00.40	Justin Mabiala
19:50-20:10	Enhanced production of ⁹⁹ Mo in inverse kinematics heavy ion reactions

Closing Remarks