

Nuclear Structure 2022

Monday, June 13, 2022

NS2022 Plenary: Light Nuclei I (9:00 AM - 10:30 AM)

-Conveners: Carl Svensson

time	[id] title	presenter
9:00 AM	[173] Welcome	
9:10 AM	[174] A four-neutron system probed through sudden removal of alpha particle from ^8He	Dr PASCHALIS, Stefanos
9:40 AM	[179] Proton inelastic scattering reveals deformation in ^8He	HOLL, Matthias
10:10 AM	[102] The structure of $^7,8,9\text{He}$ in the rotational model*	MACCHIAVELLI, Augusto

NS2022 Plenary: Heavy Nuclei I (11:00 AM - 12:30 PM)

-Conveners: Jacklyn Gates

time	[id] title	presenter
11:00 AM	[175] Recent results on nobelium isotopes spectroscopy @ SHELS	DORVAUX, Olivier
11:30 AM	[151] Spectroscopy of Trans-fermium Nuclei Using the Argonne Gas-Filled Analyzer	SEWERYNIAK, D.
11:50 AM	[140] In-beam and decay spectroscopy of ^{251}Md	MORSE, C.
12:10 PM	[164] Laser Spectroscopy of the Heaviest Actinides	LANTIS, Jeremy

NS2022 Plenary: Shapes and Collectivity I (1:30 PM - 3:00 PM)

-Conveners: Marco Siciliano

time	[id] title	presenter
1:30 PM	[54] From shape coexistence to shape isomers in atomic nuclei	KORTEN, Wolfram
1:50 PM	[74] New developments of shell models for heavy deformed nuclei	SUN, Yang
2:10 PM	[76] Level lifetime measurements in neutron-rich Zr and Mo isotopes around $A = 110$ through in-beam gamma-ray spectroscopy	MOON, Byul
2:30 PM	[105] Shape and collectivity in ^{80}Ge studied via Coulomb Excitation	RHODES, Daniel

NS2022 Plenary: Shells/Magicity I (3:30 PM - 5:00 PM)

-Conveners: Mark Caprio

time	[id] title	presenter
4:15 PM	[115] Lifetime measurement of first 4+ state in ^{102}Sn	ZHANG, guangxin
4:35 PM	[158] New aspects of the physics of charge radii	AFANASJEV, Anatoli

Tuesday, June 14, 2022

NS2022 Plenary: Heavy Elements II (9:00 AM - 10:30 AM)

-Conveners: **Walid Younes**

time	[id] title	presenter
9:00 AM	[180] Gamma-ray spectroscopy of nuclear fission	WILSON, J. N.
9:30 AM	[127] The Broad Impact of Mass-Number Measurements for Heavy Element Studies	PORE, Jennifer
9:50 AM	[163] Decay Spectroscopy of High-K Isomers in Deformed Neutron-rich $180 < A < 190$ Nuclei via Fragmentation of ^{198}Pt	CHOWDHURY, P.
10:10 AM	[117] New evidence for alpha clustering structure in the ground state band of ^{212}Po	Mr VON TRESCKOW, Martin

NS2022 Plenary: Islands of Inversion (11:00 AM - 12:30 PM)

-Conveners: **D. Bazin**

time	[id] title	presenter
11:00 AM	[181] Investigating the Spin-Orbital splitting in the N=19 isotones using SOLARIS	CHEN, Jie
11:30 AM	[129] Single-nucleon transfer reactions probed in inverse kinematics with the ISOLDE Solenoidal Spectrometer - recent highlights	SHARP, David
11:50 AM	[131] Investigation of the ^{46}Ar proton wave function: the $^{46}\text{Ar}(^3\text{He}, d)^{47}\text{K}$ direct reaction	BRUGNARA, Daniele
12:10 PM	[99] Nuclear Structure of ^{36}Al and ^{36}Si via β -decays of ^{36}Mg and ^{36}Al	LUBNA, Rebeka Sultana

NS2022 Plenary: Shapes and Collectivity (1:30 PM - 3:00 PM)

-Conveners: **Peter Bender**

time	[id] title	presenter
1:30 PM	[146] Lifetime measurements in fission fragments: Evolution of nuclear shapes and triaxiality	GÖRGEN, Andreas
1:50 PM	[159] First Evidence of Axial Shape Asymmetry and Shape Coexistence in ^{74}Zn : Suggestion for a Northern Extension of the N=40 Island of Inversion	ROCCHINI, Marco
2:10 PM	[84] Octupole collectivity in $^{74,76}\text{Kr}$ studied with inelastic proton scattering in inverse kinematics	SPIEKER, Mark
2:30 PM	[80] Collectivity evolution of proton-rich Mo isotopes	HA, Jeongsu

NS2022 Plenary: Statistical Structure and Astrophysics (3:30 PM - 5:00 PM)

-Conveners: **Dorthea Gjestvang**

time	[id] title	presenter
3:30 PM	[60] Photon Strength Function Studies: Progress and Outlook	Prof. WIEDEKING, Mathis
3:50 PM	[141] β -decay strength distributions of neutron-rich isotopes for r-process nucleosynthesis	LYONS, Stephanie

4:10 PM	[51] Measurements of the E1-strength in Fe and Ni nuclei around the threshold	WIELAND, Oliver
4:30 PM	[100] Gamma-Particle Coincidence Studies of $^{93}\text{Sr}(d,p)^{94}\text{Sr}$ via the Surrogate Reaction Method	RICHARD, Andrea

Wednesday, June 15, 2022

NS2022 Plenary: Mirrors and Proton-Rich Nuclei (9:00 AM - 10:30 AM)

-Conveners: A. Rogers

time	[id] title	presenter
9:00 AM	[177] Symmetry and collectivity of mirror nuclei	Dr WIMMER, Kathrin
9:30 AM	[59] Determination of the neutron-deficient ^{54}Ni charge radius and symmetry energy constraints using the difference in mirror pair charge radii	PINEDA, Skyy
9:50 AM	[71] Discovery of the proton emitter ^{116}La	CEDERWALL, Bo
10:10 AM	[123] Advances in experimental methods to investigate the isospin breaking effects in isobaric triplets	RUOTSALAINEN, Panu

NS2022 Plenary: New Facilities (11:00 AM - 12:30 PM)

-Conveners: Andrew Boston

Thursday, June 16, 2022

NS2022 Plenary: Lasers (9:00 AM - 10:30 AM)

-Conveners: Kyle Leach

time	[id] title	presenter
9:00 AM	[182] Recent highlights and new developments in (fluorescence based) collinear laser spectroscopy at ISOLDE	MALBRUNOT-ETTENAUER, Stephan
9:30 AM	[147] COLLINEAR LASER SPECTROSCOPY ON THE PALLADIUM ISOTOPIC CHAIN	ORTIZ CORTES, Alejandro
9:50 AM	[139] Nuclear moments of indium isotopes reveal abrupt change at magic number 82	VERNON, Adam
10:10 AM	[128] Beta-delayed neutron emission near ^{54}Ca	XU, Zhengyu

NS2022 Plenary: Light Nuclei II (11:00 AM - 12:30 PM)

-Conveners: D.G. Jenkins

time	[id] title	presenter
11:00 AM	[183] Ab initio description of nuclear reactions with applications to astrophysics	QUAGLIONI, Sofia
11:30 AM	[57] Short-range correlations in the mirror nuclei ^3H and ^3He	ARRINGTON, John
11:50 AM	[103] Study the isomeric state of ^{16}N via the $^{16}\text{N}^{g,m}(d,^3\text{He})$ reaction	TANG, Tsz Leung
12:10 PM	[101] Symmetries as a framework for understanding the emergence of nuclear collective behavior	MCCOY, Anna

NS2022 Plenary: Shapes and Collectivity III (1:30 PM - 3:00 PM)

-Conveners: Gordon Ball

time	[id] title	presenter
1:30 PM	[58] Study of cross-shell excitations near the 'island of inversion' using fusion-evaporation and Doppler shift methods	WILLIAMS, Jonathan
1:50 PM	[138] Mapping the $N = 40$ Island of Inversion with neutron-rich iron isotopes at TITAN	PORTER, William
2:10 PM	[73] $K=4+$ Band-heads in ^{160}Gd	YATES, Daniel
2:30 PM	[86] Configuration mixing investigation in Ge isotopes through $E0$ strength measurements	PORZIO, Carlotta

NS2022 Plenary: Shells and Magicity II (3:30 PM - 5:00 PM)

-Conveners: Corina Andreoiu

time	[id] title	presenter
3:30 PM	[109] Investigating the Nuclear Shell Evolution in Neutron-Rich Calcium	COLEMAN, Robin
3:50 PM	[98] New experimental decay information of β -delayed neutron emitters for very exotic neutron-rich nuclei in the north-east of double magic ^{78}Ni region	Dr CABALLERO-FOLCH, Roger

4:10 PM	[114] Beta decay strength of ^{78}Ni to neutron-unbound states revealed by ^{79}Cu	SINGH, Maninder
4:30 PM	[111] First β -decay spectroscopy of ^{135}In and new β -decay branches of ^{134}In	PIERSA-SILKOWSKA, Monika

Friday, June 17, 2022

NS2022 Plenary: Fundamental Symmetries (9:00 AM - 10:30 AM)

-Conveners: M. Wiedeking

time	[id] title	presenter
9:00 AM	[178] Sub-keV Decay-Recoil Spectroscopy with Superconducting Quantum Sensors	Dr LEACH, Kyle
9:30 AM	[61] Precision spectroscopy studies of radioactive molecules for fundamental physics	UDRESCU, Silviu-Marian
9:50 AM	[161] Searching for Tensor Currents in the Weak Interaction in the β -decay of ${}^8\text{Li}$ and ${}^8\text{B}$	GALLANT, Aaron
10:10 AM	[148] Evidence of seniority conservation via lifetimes measurements in the N=50 isotones towards 100Sn	PÉREZ VIDAL, Rosa María

NS2022 Plenary: Shapes and Collectivity IV (11:00 AM - 12:30 PM)

-Conveners: Yang Sun

time	[id] title	presenter
11:00 AM	[145] Nuclear structure of the neutron-deficient cadmium isotopes close to ${}^{100}\text{Sn}$	SICILIANO, Marco
11:20 AM	[77] First results from CLARION2-TRINITY: Coulomb Excitation of ${}^{49}\text{Ti}$ and the proton-neutron interaction	Dr GRAY, Timothy
11:40 AM	[133] Prediction of nuclear masses with an artificial neural network	MUMPOWER, Matthew
12:00 PM	[142] Microscopic calculations of neutron-rich isotopes near ${}^{40}\text{Mg}$	LAUBER, Stephanie

NS2022 Plenary: Closing Session (1:30 PM - 2:30 PM)

-Conveners: Heather Crawford

time	[id] title	presenter
1:30 PM	[184] Poster Session Winner I	
1:45 PM	[185] Poster Session Winner II	
2:00 PM	[186] Closing Remarks	