

FRIDAY, 29/9/2023

08:30-09:00 Registration, Main Auditorium

09:00-09:30 Welcome Addresses

Session 1: Invited Presentations, Chair: R. Vlastou

09:30-10:00 A. Gurbich, 'Determination of the Stopping Power and Range of Ions in Matter by Resonance Methods' [Abstract](#)

10:00-10:30 A. Chebboubi, 'Study of fission products characteristics with the LOHENGRIN spectrometer' [Abstract](#)

10:30-11:00 A. Pakou, 'Global studies of reactions with weakly bound nuclei at sub- and near- barrier energies' [Abstract](#)

11:00-11:30 Coffee Break

Session 2: Neutron Physics, Chair: M. Diakaki

11:30-11:45 V. Michalopoulou, 'Measurement of the $^{235}\text{U}(n,f)$ cross-section using the $^{10}\text{B}(n,\alpha)$ reaction as reference at EAR-2 of n_TOF at CERN: first results' [Abstract](#)

11:45-12:00 S. Dede, 'Production of actinide targets using Solution Combustion Synthesis and the effects after Ion and Neutron irradiation' [Abstract](#)

12:00-12:15 S. Chasapoglou, 'Study of (n,x) Reactions on Ge isotopes in the Energy Range Between 15.5 and 18.9 MeV Implementing Enriched Ge Targets' [Abstract](#)

12:15-12:30 G. Gkatis, 'Angular distribution measurements of neutron elastic scattering by natural carbon' [Abstract](#)

12:30-12:45 N. Kyritsis, 'First Results from the $^{243}\text{Am}(n,f)$ cross-section measurement at the nTOF facility at CERN' [Abstract](#)

12:45-13:00 K. Kaperoni, 'Characterization of Diamond Detector Response to Neutron Beams at the NCSR "Demokritos"' [Abstract](#)

13:00-13:15 S. Goula, 'Charged particle spectroscopy using a ring-shaped silicon nTD detector: First results on the detector's response using a neutron converter target at n_TOF/CERN' [Abstract](#)

13:15-14:30 Photo + Light lunch

Session 3: Nuclear Reactions, Nuclear Astrophysics, Nuclear Structure, Chair: Th. Mertzimekis

14:30-14:45 M. Kokkoris, 'Measured, Evaluated, and Benchmarked Differential Cross Sections for Proton Elastic Scattering on natN in the Energy Range $E=3-5$ MeV' [Abstract](#)

14:45-15:00 A. Tsantiri, 'Constraining the Astrophysical γ Process: Cross Section Measurements of (p,γ) Reactions in Inverse Kinematics' [Abstract](#)

15:00-15:15 S. Koulouris, 'Multinucleon Transfer Reactions in the ^{70}Zn (15 MeV/nucleon) + ^{64}Ni System: Detailed Studies' [Abstract](#)

15:15-15:30 K. Palli, 'Elastic Scattering of $^{8}\text{B}+^{90}\text{Zr}$ at Sub-barrier Energies' [Abstract](#)

15:30-15:45 A. Zyriliou, 'Nuclear structure investigations in medium-weight isotopes' [Abstract](#)

15:45-16:00 M. Efsthathiou, 'Nuclear lifetime measurements around $Z=50$ ' [Abstract](#)

16:00-16:15	P. Vasileiou, 'Fast-timing measurements of nuclear lifetimes in the Z~50 region'	Abstract
16:15-16:30	S. Pelonis, 'Design and simulations of a linear Paul trap for single-ion spectroscopy'	Abstract
16:30-17:00	Coffee Break	
Session 4: Neutron Physics, Nuclear Astrophysics, Nuclear Reactions, IBA, Chair: A. Lagoyannis		
17:00-17:15	A. Stamatopoulos, 'The 88Zr study at DICER at LANSCE'	Abstract
17:15-17:30	P. Gastis, 'Fission-Fragment Mass Spectrometry at the Los Alamos Neutron Science Center Facility'	Abstract
17:30-17:45	P. Tsintari, 'Direct (p,n) Reaction Measurements of Astrophysical Interest Using Radioactive Beams: A Novel Approach with SECAR'	Abstract
17:45-18:00	N. Dimitrakopoulos, 'Extraction of the Nuclear Level Density of the neutron rich isotopes 68Cu & 65Ni using the LANSCE/WNR neutron beams and the evaporation technique'	Abstract
18:00-18:15	M. E. Stamati, 'Nuclear Astrophysics at NEAR/n_TOF: Data analysis of first MACS measurements'	Abstract
18:15-18:30	E. Ntemou, 'Lattice-site location of Mn in Mn-rich Sb2Te3 topological insulators using MeV ion channeling'	Abstract
18:30-18:45	F. Maragkos, 'Systematic study of 3He – induced reactions and elastic scattering on light isotopes for applications in Ion Beam Analysis'	Abstract
18:45-20:45	General Assembly of HNPS	
21:00	Conference Dinner at Liatiko Restaurant	

SATURDAY, 30/9/2023

Session 5: Theoretical Nuclear Physics, Chair: A. Martinou

09:00-09:15	D. Bonatsos, 'Shape/phase transitions and shape coexistence in even-even nuclei'	Abstract
09:15-09:30	Ch. C. Moustakidis, 'The multi-messenger nuclear physics of neutron stars'	Abstract
09:30-09:45	V. Prassa, 'Covariant density functional description of shape phase transitions and shape coexistence in heavy nuclei'	Abstract
09:45-10:00	D. K. Papoulias, 'Probing new physics with nuclear recoil data from COHERENT'	Abstract
10:00-10:15	K. Folias, 'Study of quarkyonic matter and applications in neutron stars'	Abstract
10:15-10:30	M. Vikiaris, 'Supramassive compact objects with neutron star and dark matter origins'	Abstract
10:30-10:45	P. Laskos-Patkos, 'Signatures of hadron-quark phase transition through the r-mode instability in twin stars'	Abstract
10:45-11:15	Coffee Break	

Session 6: Instrumentation, Cultural Heritage, Nuclear Materials, Chair: Th. Vasilopoulou

11:15-11:30	I. Savvidis, 'Large Volume Spherical Proportional Counter for Dark Matter Detection From the $\Phi=60\text{cm}$ Sphere to the $\Phi=3\text{m}$ Sphere and the New Design of the Sensors'	Abstract
11:30-11:45	A. G. Karydas, 'Fundamental X-ray studies using Synchrotron Radiation'	Abstract
11:45-12:00	E. Androulakaki, 'A modular custom-built Macro-XRF spectrometer for Heritage Science'	Abstract
12:00-12:15	G. Savvidis, 'Reactor neutrino detection with the NEWS-G3 experiment'	Abstract
12:15-12:30	S. Pantousa, 'Fe+ ion irradiation of Fe-10at%Cr alloys at 300oC: Magnetic and structural effects'	Abstract
12:30-12:45	V. Chatzikos, 'Positron Annihilation Study of Neutron-Induced Defects in Single Crystal Tungsten: Effects of Irradiation Dose and Temperature'	Abstract
12:45-13:00	M. Giamouridou, 'Proton irradiation studies of Uranium Nitride (UN) and (U,Zr)N composite fuels'	Abstract
13:00-13:15	I. Goula, 'A study on the wall effect of Spherical Proportional Counter for long-range particle detection'	Abstract
13:15-14:15	Light lunch	
14:15-15:15	Poster Session	

Session 7: Environment, Chair: A. Ioannidou

15:15-15:30	A. Clouvas, 'A comparative analysis of Cs-137 soil migration over a thirty six years study period (1987-2023) : Experimental measurements vs. compartment model predictions'	Abstract
15:30-15:45	G. Trabidou, 'Inventory of natural radionuclides in the Greek mineral springs'	Abstract
15:45-16:00	D. L. Patiris, 'Radioactivity mapping of beach sand by mobile in situ gamma-ray spectrometry'	Abstract

16:00-16:15	<i>K. Karfopoulos, 'Joint IAEA/EEAE Regional Intercomparison Exercise on Radioanalytical Analysis of NORM Samples'</i>	Abstract
16:15-16:30	<i>N. Salpadimos, 'Atmospheric Dispersion Software Intercomparison Exercise and Sensitivity of Results'</i>	Abstract
16:30-16:45	<i>I. Madesis, 'αSPECT: Adaptation of existing radon detectors to deep-sea operation'</i>	Abstract
16:45-17:00	<i>G. Siltzovalis, 'Validation and Testing of Novel Underwater Sensors at the Hydrothermal Vent Field of Milos'</i>	Abstract
17:00-17:15	<i>F. K. Pappa, 'Radioactivity in building materials used in Lesvos, Greece'</i>	Abstract
17:15-17:45	Coffee Break	
Session 8: Nuclear Theory, Nuclear Reactions, Nuclear Materials, Chair: Ch. Tsabaris		
17:45-18:00	<i>E. Krotscheck, 'Triplet pairing in neutron matter'</i>	Abstract
18:00-18:15	<i>T. S. Kosmas, 'Open problems in conventional and exotic muon physics: Predictions of numerical solutions of fundamental differential equations'</i>	Abstract
18:15-18:30	<i>O. Sgouros, 'A global description of the 18O+48Ti collision within the NUMEN project'</i>	Abstract
18:30-18:45	<i>V. Soukeras, 'Recent results in the study of the 20Ne + 130Te collision within the NUMEN project and future perspectives'</i>	Abstract
18:45-19:00	<i>P. T. Oikonomou, 'Colour-Flavour Locked Quark Stars in light of the Compact Object in HESS J1731-347 and the GW190814 Event'</i>	Abstract
19:00-19:15	<i>E. Charatsidou, 'Advancements in Nuclear Engineering and Nuclear Materials: Insights from Sweden's SUNRISE Centre and Initiatives on Public Acceptance'</i>	Abstract
19:15	Closing Remarks for HNPS 2023	