

# Program of NSP2019

September 11 - Wednesday		
08:00 - 09:30	Registration	
09:30 - 09:45	Conference Room: Opening Ceremony	
09:45 - 10:25	<b>Invited Speaker 1</b> <b>Prof. David Jenkins</b> (The University of York, England) Fusion in Massive Stars: Pushing the $^{12}\text{C}+^{12}\text{C}$ Cross - Section to the Limits with the STELLA Experiment at IPN Orsay	<b>Chair:</b> <b>Prof. Nihal Büyükçizmeci</b>
10:25 - 11:05	<b>Invited Speaker 2</b> <b>Prof. Ali Ekber Kuliye</b> (The National Aviation Academy of Azerbaijan, Azerbaijan) Rotational, Translational and Galilean Invariant Model for Dipole States in QRPA	
11:05 - 11:35	Group Photo and Coffee Break	
Session 1	<b>Room 1</b> <b>Session Chair: Prof. Asım Soylu</b>	<b>Room 2</b> <b>Session Chair: Prof. Murat Aygün</b>
11:35-12:50	Improving Nuclear Quadrupole Resonance (Nqr) Spectra Using Weak/High Magnetic Field and the Defective (Nqr) Pulse Separation  <b>Ahmet Saim Selvi (Turkey)</b>	Bubble Structure in Exotic Nuclei <b>Gaurav Saxena (Algeria)</b>
11:50-12:05		Treatise of Angular Distributions of $^3\text{He}$ Elastic Scattering from Stable Selenium Isotopes <b>Zehra Merve Cinan (Turkey)</b>
12:05-12:20	Prognostication of Shock Wave Influence during Nuclear Blast <b>Gunay Abdiyeva-Aliyeva (Iran)</b>	Production of Platinum Isotopes via Sub-Barrier Fusion Cross Sections of $^{16}\text{O}$ from Stable Ytterbium Isotopes <b>Zehra Merve Cinan (Turkey)</b>
12:30 - 14:00	LUNCH	
Conference Room:		
14:00 - 14:40	<b>Invited Speaker 4</b> <b>Prof. Cemal Niyazi Sökmen</b> (Hacettepe University, Turkey) Nuclear Engineering Education and Nuclear Power Plant Projects in Turkey	<b>Chair:</b> <b>Prof. Cevad Selam</b>
14:40 - 15:20	<b>Invited Speaker 3</b> <b>Prof. Andrea VITTURI</b> (University of Padova, Italy) The Algebraic Molecular Model in $^{12}\text{C}$ and its Application to the Alpha+ $^{12}\text{C}$ Scattering	
15:20 - 15:40	Coffee Break (Poster Session) (P1 - P11)	
Session 2	<b>Room 1</b> <b>Session Chair: Prof. Cemal Niyazi Sökmen</b>	<b>Room 2</b> <b>Session Chair: Prof. Ramesh Kumar</b>
15:40-15:55	Exploring Nuclear Collectivity at Low Spins in $^{167}\text{Lu}$ Nucleus <b>Sanjay Kumar Chamoli (India)</b>	Calculations of Spontaneous Fission (Sf) Half-Lives of Superheavy Nuclei in Different Models <b>Asım Soylu (Turkey)</b>
15:55 - 16:10	Dissipative Dynamics within Stochastic Mean-Field Approach <b>İbrahim Ülgen (Turkey)</b>	Alpha And Spontaneous Fission Half-Life Predictions Of Uranium Isotopes <b>Fahrettin Koyuncu (Turkey)</b>
16:10-16:25	Determination of First Two Excited States of Even-Even Nuclei by an Artificial Intelligence Method <b>Serkan Akkoyun (Turkey)</b>	Calculation of Radiogenic Heat Productions from Marble and Glazed Tiles Used as Covering Building Materials in Turkey <b>Aybaba Hançerlioğulları (Turkey)</b>
16:25-16:40	Nuclear Shell Model Calculations for Ca Isotopes <b>Serkan Akkoyun (Turkey)</b>	Evaluation of the Excess Life Time Cancer Risk Due to Natural Radioactivity in Tap Water Consumed in Nevşehir <b>Aybaba Hançerlioğulları (Turkey)</b>

16:40-16:55	Weak Imaginary Potential Effect on the $^{18,19,20}\text{O} + ^{12}\text{C}$ Fusion Reactions at Low Energies <b>Gökhan Koçak (Turkey)</b>	Internal Bremsstrahlung Spectrum Of ( $_{37}^{86}\text{Rb}$ ) For Forbidden Beta Transition <b>Ekrem Almaz (Turkey)</b>
16:55 - 17:10	<b>Coffee Break</b>	
Session 3	<b>Room 1</b> Session Chair: Prof. Mahmut Büyükatana	<b>Room 2</b> Session Chair: Prof. Gülsen Öngüt
17:10-17:25	Comparison of E1 Response of $^{154}\text{Sm}$ and $^{155}\text{Sm}$ in the Pygmy Dipole Resonance (PDR) Region; <b>Hüseyinqulu Quliyev (Turkey)</b>	Nuclear Lattice Calculations with Chiral Effective Field Theory <b>Serdar Elhatisari (Turkey)</b>
17:25-17:40	Microscopic Description of the Giant Dipole Resonance (Gdr) Mode in $^{165}\text{Ho}$ ; <b>Hüseyinqulu Quliyev (Turkey)</b>	Evolution of Collectivity in $^{164}\text{W}$ as a Function of Spin-Quantum Number; <b>Bahadır Saygı (Turkey)</b>
17:40-17:55	Production of Hypermatter and Hypernuclei Inrelativistic Hadron and Ion Collisions <b>Nihal Buyukcizmeci (Turkey)</b>	Study of the Shell Evolution Effect on the Nuclei Around the $^{78}\text{Ni}$ Core Structure; <b>Nadjet Laouet (Algeria)</b>
20:00	<b>DINNER</b>	

<b>September 12 - Thursday</b>		
<b>Conference Room</b>		
09:00 - 09:40	<b>Invited Speaker 5</b> Assoc. Prof. Bülent Yılmaz (Ankara University, Turkey) Multi-Nucleon Transfer in Ni + Ni and Xe + Pb Reactions	<b>Chair:</b> Prof. David Jenkins
09:40 - 10:20	<b>Invited Speaker 6</b> Prof. Ramesh Kumar (Guru Kashi University, India) Triaxiality, Gamma Softness and O(6) Limit of I.B.M	
10:20 - 10:35	<b>Coffee Break</b>	
Session 4	<b>Room 1</b> Session Chair: Prof. Serdar Ünlü	<b>Room 2</b> Session Chair: Assoc. Prof. Gökhan Koçak
10:35-10:50	What caused the High Radiation Levels in Plio-Quaternary Volcanic and Pyroclastic Rocks Using as Building Materials in Isparta Volcanic Field, SW Turkey? <b>Hakan Çoban (Turkey)</b>	Modeling of Human Absorbed Dose For $^{177}\text{Lu}$ -Residronate <b>Nafise Salek (Algeria)</b>
10:50-11:05	Half-Life of the Medical Radioisotope Lu-177 for Targeted Radionuclide Therapy <b>Necla Çakmak (Turkey)</b>	Turkey's Political Economy of Nuclear Energy <b>İbrahim Aytekin (Turkey)</b>
11:05-11:20	Allowed Gt and First Forbidden Transitions in $^{71,73,75}\text{Se}$ Isotopes <b>Necla Çakmak (Turkey)</b>	The Deconvolution of the NaI (Tl) Detector Response Function for Continuous Energy Photon Spectrum by SVD approach; <b>Ekrem Almaz (Turkey)</b>
11:20-11:35	Nuclear Structure Properties of Some Isotopes around $^{78}\text{Ni}$ <b>Fatima BENRACHI (Algeria)</b>	Construction of Non Commutative Gauge Theory <b>Kouadik Smai (Algeria)</b>
11:35-11:50	Production of Conversion Electron Sources for Measurements of Internal Conversion Coefficients (Icc) <b>Bonginkosi Zikhali (South Africa)</b>	National Regulatory Provision of Designing and Operating for Safety of Nuclear Power Plant <b>Halil Akın Cezayirli (Turkey)</b>
11:50-12:05	Study of the Log(Ft) Values in Spherical and Deformed Nuclei for Some Odd-A Germanium Isotopes <b>Sadiye Çakmak (Turkey)</b>	Shell-Model Study Of The Nuclear Structure of $^{27}\text{Si}$ Nucleus <b>Hanane Mebrek (Algeria)</b>
12:10 - 13:40	<b>LUNCH</b>	

Conference Room:		
13:40 – 14:20	<p style="text-align: center;"><b>Invited Speaker 7</b>  <b>Prof. Jameel-Un Nabi</b>  <b>(Ghulam Ishaq Khan Institute of Engineering Sciences and Technology, Pakistan)</b>            Gamow-Teller Strength and Electron Capture Cross Section Calculation by pn-QRPA for selected fp-shell nuclei</p>	<p><b>Chair:</b>  <b>Prof. Ali Ekber Kuliye</b></p>
14:20 – 15:00	<p style="text-align: center;"><b>Invited Speaker 8</b>  <b>Prof. Nabil El Faramawy</b>  <b>(Ain Shams University, Egypt)</b>            The EPR dose response of tooth enamel</p>	
Session 5	<p><b>Room 1</b>  <b>Session Chair: Prof. Sezai Yalçın</b></p>	<p><b>Room 2</b>  <b>Session Chair: Assoc. Prof. Necla Çakmak</b></p>
15:00-15:15	<p>High Temperature X-Ray Diffraction Study of Tantalum–Carbides Phases  <b>Afir Arezki (Algeria)</b></p>	<p>High Temperature X-Ray Diffraction Study of Tantalum – Oxides Phases;  <b>Chikh-Afir Houria (Algeria)</b></p>
15:15-15:30	<p>The Radioisotope Activity Concentrations of Some Medical and Aromatic Plants Growing in Bitlis  <b>Sultan Şahin Bal (Turkey)</b></p>	<p>Investigation of Some Structural Properties of Even - Even Zirconium Isotopes within IBM-1 Model  <b>Mahmut Bökükata (Turkey)</b></p>
15:30 – 15:50	<p><b>Coffee Break (Poster Session) (P12 – P23)</b></p>	
Session 6	<p><b>Room 1</b>  <b>Session Chair: Assoc. Prof. Aybaba Hançerliođlu</b></p>	<p><b>Room 2</b>  <b>Session Chair: Assoc. Prof. Serkan Akkoyun</b></p>
15:50-16:05	<p>Determination of The Efficiency of NaI(Tl) Detector by GATE Simulation Program  <b>Didem Güngür (Turkey)</b></p>	<p>Investigation of (N,P) and (G,P) Reaction Cross-Sections of Zr Isotopes Used as Imaging Tracers  <b>Yusuf Kavun (Turkey)</b></p>
16:05-16:20	<p>An Application of different nuclear potentials on CDCC Model  <b>Şule Karatepe Çelik (Turkey)</b></p>	<p>Radiation Absorption Properties of Pb(NO<sub>3</sub>)<sub>2</sub> Doped Wallpapers  <b>Yusuf Kavun (Turkey)</b></p>
16:20-16:35	<p>The Comparison of Gamma-Ray Transmissions between Measurement and Simulation Obtained with Different Cerobend Blocks Used in Radiotherapy  <b>Nuray Yavuzkanat (Turkey)</b></p>	<p>The Calculation of K Shell XRF Parameters of Some First inner Transition Metals  <b>Mine Uđurlu (Turkey)</b></p>
16:35-16:50	<p>Applications of Nuclear Science: Neutron Features and Interactions with Matter  <b>Rezvan Rezaeizadeh (Iran)</b></p>	<p>The Concentration Effect to K-Shell Fluorescence Cross Sections of Tixco1-X Alloys  <b>Mine Uđurlu (Turkey)</b></p>
17:00 - 18:30	<p><b>Boarding to bus and Trip to Bitlis Center</b></p>	
20:00	<p><b>GALA DINNER</b></p>	

September 13 – Friday	
08:35-09:55	<p><b>Boarding to bus and Trip to Bitlis Center</b></p>
09:55-11:30	<p><b>Travel to Ahlat</b></p>
11:30-12:25	<p><b>Lunch</b></p>
12:25-13:00	<p><b>Free time</b></p>
13:15-14:25	<p><b>Travel to Aygır Lake in Adilcevaz</b></p>
14:35-18:30	<p><b>Travel to Akdamar Island (Fee of museum is 33 TL)</b></p>
18:30 – 20:30	<p><b>Arrival to Bitlis Eren University</b></p>

## POSTERS

- P1.** Study of  $^{156}\text{Dy}$  Nucleus in the Oblate to Prolate Transitional Region; Zahra Jahangiri Tazekand (P1)
- P2.** A Treatment Planning Comparison of 3D Conformal Therapy and Volumetric Intensity Modulated Arc Therapy for Treatment of Advanced Nasopharyngeal Cancer; Bouchra Imene Chibane, Fatima Benrachi, Mohamed Salah Balu, Hadjer Gossa(P2)
- P3.** Ubf (5) to Obf (6) Shape Phase Transition in Odd-A Nuclei in a Multi-J Model; Maryam Ghapanvari, Narjes Amiri, Sara Vosoughi, Mohammad Ali Jafarizadeh(P3)
- P4.** Modeling of Human Absorbed Dose for  $^{177}\text{Lu}$ -Residronate; Nafise Salek, (P4)
- P5.** Investigation of Nuclear Reactors Types; Suna Yurt(P5)
- P6.** Monte Carlo Simulation to Shield Neutrons Produced in EC Fusion Reactor; Ahmet Turan(P6)
- P7.** Effect of Level Density Parameter on Temperature Dependent Fusion Barrier; Seyed Alireza Alavi, Vahid Dehghani, Fariba Ghorbani(P7)
- P8.** Thermal Properties of  $Z=115,116$  Superheavy Nuclei; Vahid Dehghani, Seyed Alireza Alavi(P8)
- P9.** Radioactive Reference Material Production with  $4\pi$  Gamma Method; Berkay Çetin, Sefa Sayın, Meryem Seferinoğlu, Emin Yeltepe (P9)
- P10.** Calculation of  $^{99}\text{Mo}$  Production Cross Section of Natural Molybdenum and Natural Ruthenium Nucleus by using TALYS Code; Neslihan Sena Erdem, Veli Dağlı(P10)
- P11.** Investigation of Gamma Attenuation Coefficients of Boron Doped LDPE And HDPE Polymers by GEANT4 Code; Veli Dağlı, Neslihan Sena Erdem, Turgay Korkut, Hatun Korkut (P11)
- P12.** Characterization of HPGe Detector Efficiency In Different Counting Geometries with Monte Carlo Simulations and Radioactivity Standardizations of Some Radionuclide; Sefa Sayın, Berkay Çetin, Emin Yeltepe, Meryem Seferinoğlu(P12)
- P13.** Dosimetry Evaluation of a Carrier- Free  $^{90}\text{Y}$  Labeled DOTMP; Mohsen Mehrabi, Nafise Salek, Sara Vosoughi(P13)
- P14.** Quantum Phase Transition in Even and Odd Nuclei by Using Algebraic Three-Cluster Model; Narjes Amiri(P14)
- P15.** Simulation and Design of Biological Shield for IECF Device using MCNP Code; Sara Vosoughi, Maryam Ghapanvari, Nafise Salek, Mohsen Mehrabi(P15)
- P16.** Proton-Proton Collision at High Energies; Mohsun Alizada, Azar Ahmadov(P16)
- P17.** Investigation of Rotational Bands of  $^{154-162}\text{Gd}$  Isotopic Chain by Su(3) Partial Dynamical Method; Seyed Khalil Mousavi Mobarakeh, Hadi Sabri(P17)
- P18.** Gamma Dose Measurements in the Beach Sands of Tatvan, Ahlat and Adilcevaz; Muhammed Fatih Kuluöztürk, Şule Karatepe(P18)
- P19.** Seasonal Radon Measurements in Surface Water Samples From Van Lake, Turkey; Halime Kayakökü, Mahmut Doğru(P19)
- P20.** Investigation of the Collimator Effect on the  $3''\times 3''$  NaI(Tl) Detector System by the FLUKA code ; Zehra Nur Kuluöztürk, Nilgün Demir(P20)
- P21.** An Application of Proximity Potentials to Some Fusion Reactions; Murat Aygün (P21)
- P22.** Examining Nonstandard Higgs Couplings via Photon – Photon Fusion at FCC; Gülistan Akkaya Selçin(P22)
- P23.** Nuclear structure studies of  $^{60-66}\text{Cu}$  transitional odd-odd nuclei in the framework of the neutron-proton interacting boson-fermion model; Maryam Ghapanvari, Mohammad Ali Jafarizadeh, Narjes Amiri (P23)