



INTERNATIONAL CONFERENCE
DYNAMIC DAYS CENTRAL ASIA AND CAUCASUS

September 28 – 30, 2022

BAKU STATE UNIVERSITY | BAKU, AZERBAIJAN

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September 28, Wednesday

Opening Ceremony

Baku State University, Hall 316 (Faculty of Physics)

[Link to session](#)

09:00 - 09:30	Registration
09:30 - 10:00	Opening Ceremony/Group photo

Morning session

Chair: Giulio Casati (Italy)

[Link to session](#)

10:00 - 10:30	DYNAMICAL BEHAVIOR OF JOSEPHSON JUNCTION: ANHARMONIC AND FRUSTRATION EFFECTS Iman Askerbeyli <i>Ankara University, Türkiye</i>
10:30 - 11:00	LONG-RANGE SPIN CHIRALITY DIMER ORDER IN THE SPIN $S = 1/2$ HEISENBERG CHAIN WITH MODULATED DZVALOSHINSKII-MORIYA INTERACTIONS George Japaridze <i>Ilya State University, Georgia</i>
11:00 - 11:30	Coffee Break
11:30 - 12:00	QUANTUM CHROMODYNAMIC CORRECTIONS TO THE DIRECT PHOTON PRODUCTION IN PROTON-PROTON COLLISIONS AT THE NICA ENERGY Mohsun Alizada <i>Baku State University, Azerbaijan</i>
13:00 - 14:00	Lunch

Afternoon session

Chair: Boris Malomed (Israel)

[Link to session](#)

15:00 - 15:30	DISCOVERING DYNAMICAL PHASE TRANSITIONS AND QUANTUM RESONANCES THROUGH MACHINE LEARNING METHODS George Tsironis <i>University of Crete, Greece</i>
15:30 - 16:00	DETECTING THE EVENT OF A SINGLE PHOTON LOSS ON QUANTUM SIGNALS Aikaterini Mandilara <i>National and Kapodistrian University of Athens, Greece</i>
16:00 - 16:30	Coffee Break
16:30 - 17:00	TRANSPARENT NONLINEAR NETWORKS Jambul Yusupov <i>Yeju Technical Institute in Tashkent, Uzbekistan</i>
18:30 - 20:00	Dinner

September 29, Thursday

Morning session

Chair: Waqas Masood (Pakistan)

[Link to session](#)

10:00 - 10:30	PT-SYMMETRIC NONLINEAR NETWORKS Davron Matrasulov <i>Turin Polytechnic University in Tashkent, Uzbekistan</i>
10:30 - 11:00	CLASSICAL PHYSICS AND BLACK BODY RADIATION Giulio Casati <i>University of Insubria, Italy</i>
11:00 - 11:30	Coffee Break
11:30 - 12:00	INTERACTION OF ION-ACOUSTIC SOLITONS FOR MULTI-DIMENSIONAL ZAKHAROV KUZNETSOV EQUATION IN VAN ALLEN RADIATION BELTS Waqas Masood <i>COMSATS University, Pakistan</i>
12:00 - 12:30	PLASMA WITH NANOPARTICLES: ADVANCES AND APPLICATION Almasbek Utegenov <i>Al-Farabi Kazakh State University, Kazakhstan</i>
13:00 - 14:00	Lunch

Afternoon session

Chair: George Tsironis (Greece)

[Link to session](#)

15:00 - 15:30	ON THE DYNAMICAL SYMMETRY OF A SEMICONFINED HARMONIC OSCILLATOR MODEL WITH A POSITION-DEPENDENT EFFECTIVE MASS Elchin Jafarov <i>Institute of Physics, Azerbaijan</i>
15:30 - 16:00	QUANTUM DYNAMICS OF A PT-SYMMETRIC KICKED PARTICLE IN A 1D BOX Saparboy Rakhmonov <i>Chirchik State Pedagogical University, Uzbekistan</i>
16:00 - 16:30	Coffee Break
16:30 - 17:00	THE LINEAR POLARISATION OF γ-QUANTUM IN THE DECAY $H(h, A) \Rightarrow f\bar{f}\gamma$ Emilya Omarova <i>Baku State University, Azerbaijan</i>

18:30 - 20:00	Dinner
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September 30, Friday

Morning session

Chair: Ali Gencer (Türkiye)

[Link to session](#)

10:00 - 10:30	MULTIDIMENSIONAL SOLITONS Boris Malomed <i>Tel-Aviv University, Israel</i>
10:30 - 11:00	SOLITON GENERATION IN OPTICAL FIBER NETWORKS Mashrab Akramov <i>National University of Uzbekistan, Uzbekistan</i>
11:00 - 11:30	Coffee Break
11:30 - 12:00	SPECTRUM, LIFSHITZ TRANSITIONS, AND DIAMAGNETIC CURRENT IN FRUSTRATED LADDERS WITH A UNIFORM FLUX Bachana Beradze <i>Ilia State University, Georgia</i>
12:00 - 12:30	DEVELOPMENT OF A NEW VISUALIZATION TOOL FOR SOLAR IMAGING DATA Aiganym Sarsembaeva <i>Al-Farabi Kazakh National University, Kazakhstan</i>
13:00 - 14:00	Lunch

Afternoon session

Chair: Elchin Jafarov (Azerbaijan)

[Link to session](#)

15:00 - 15:30	USING THE EVOLUTION OPERATOR METHOD TO DESCRIBE QUADRATIC QUANTUM SYSTEMS Shakir Nagiyev <i>Institute of Physics, Azerbaijan</i>
15:30 - 16:00	a_1 MESON-NUCLEON COUPLING CONSTANT AT FINITE TEMPERATURE FROM THE SOFT-WALL AdS/QCD MODEL Shahnaz Taghiyeva <i>Baku State University, Azerbaijan</i>
16:00 - 16:30	Coffee Break
16:30 - 17:00	DECODING THE PROTON VELOCITY LINE SHAPE USING Λ^0 DECAYS TOWARDS HIGH PRECISION E-BY-E FLUCTUATIONS WITH THE IDENTITY METHOD Shamkhal Abbasov <i>National Nuclear Research Center, Azerbaijan</i>

18:30 - 20:00	Dinner
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