

**Session Program**

**Jul 8 - 12, 2025**

**BPU 12 Congress**

***Plasma, Statistical and Nonlinear Physics***

Politechnica Univ  
Splaiul Independenței 313, București 060042

## Wed, July 9

3:00 PM

### Plasma, Statistical and Nonlinear Physics

Session | Location: Politechnica Univ, Splaiul Independenței 313, București 060042

3:00 – 3:30 PM

#### From laboratory to space: proton irradiation of carbonaceous dust analogues deposited by atmospheric pressure plasma

Speaker

Ionut Topala

3:30 – 3:50 PM

#### Coupled semidiscrete solitonic equations of the first multiplicative Bogoyavlensky and its soliton solutions

Speaker

CORINA NICOLETA BABALIC

3:50 – 4:10 PM

#### Classical and Quantum Description of the Kapitza–Dirac Effect

Speaker

Darius-Matei Banu

4:10 – 4:30 PM

#### About test particle diffusion in a sheared magnetic field

Speaker

Marian Negrea

4:30 – 4:50 PM

#### Exact critical temperature of Ising models with external field

Speaker

Viktor Urumov

5:00 PM

5:30 PM

### Plasma, Statistical and Nonlinear Physics

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5:30 – 5:50 PM

#### The direct and inverse Lie symmetry techniques for nonlinear physical systems

Speaker

Alina Pauna

5:50 – 6:10 PM

#### Solutions of the fractional Chafee-Infante equation by various analytical methods

Speaker

Dr Alina-Maria Pauna

6:10 – 6:30 PM

#### Edge-core interaction via vorticity filaments emerging from ion inertial dynamics in tokamak plasma

Speaker

Florin Spineanu

6:30 – 6:50 PM

#### Coherence and memory in turbulence

Speaker

Madalina Vlad

7:30 PM