
MASTER PROGRAM

for

**EIGHTEENTH INTERNATIONAL CONFERENCE
APPLICATION OF MATHEMATICS IN TECHNICAL AND NATURAL
SCIENCES
JUNE 27-JULY 2, 2026**

**All times in the program are GMT+3 (East-European time). Please
synchronize your local time with respect to GMT and join the announced
Zoom sessions on time.**

SUNDAY, JUNE 28, 2026

FLAMINGO GRAND HALL

Join Zoom Meeting **08:00-19:00**

<https://us02web.zoom.us/j/84347451867?pwd=PYQwIVJtkMBjHtMa9DOSyVMXd9vLR.1>

Meeting ID: 843 4745 1867

Passcode: 968457

Meeting chat link

<https://us02web.zoom.us/jc/84347451867>

Hosted by Michail Todorov

08:30-9:30

PLENARY LECTURE: Shuguan Ji

Title: *Breather Solutions for the Nonlinear Wave Equation in
Inhomogeneous Media*

9:30-10:00 BREAK

Session: MATHEMATICAL PHYSICS

- 10:00-10:30 Speaker: Bogdan Dimitrov
Title: *Towards a General Theory of GPS Inter-satellite Communications between Moving Satellites on Arbitrary Space Trajectories Accounting for General Relativity Effects*
- 10:30-11:00 Speaker: Tihomir Valchev
Title: *New S-Integrable Nonlinear Evolution Equations with Additional Constraints*
- 11:00-11:30 Speaker: Yuri Bozhkov
Title: *Critical Nonlinear Elliptic and Hyperbolic PDE Systems*
- 11:30-12:00 Speaker: Rossen Ivanov
Title: *Vortices Interacting with Long Surface Water Waves*
- 12:00-12:30 Speaker: Silvia Assenova
Title: *Transport safety -- Methodology, Quantitative and Qualitative Assessment of the Link between Meteorological Conditions and Safety*

Lunch Break

- 14:00-14:30 Speaker: Antonio da Silva
Title: *Electromagnetic Field-induced Metric Perturbations in General Relativity: A Weak-field Analytical Framework*
- 14:30-15:15 KEYNOTE TALK: Viktor Didenko
Title: *Approximate Solution of Biharmonic Problems in Multiply Connected Non-smooth Domains*
- 15:15-16:00 KEYNOTE TALK: Vesselin Gueorguiev
Title: *Time Reparametrization Invariance and the Hubble*
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Tension

Break

Session E-LEARNING

16:30-17:00 Speaker: Alex Baykin
Title: *Mathematical Modeling of Digital Documentation Adoption and Sustainability Indicators in Courier Services*

17:00-17:30 Volodymyr: Chumakov
Title: *On the Analysis of the Phase Spectrum of a Two-Frequency Signal*

17:30-18:00 Speaker: Velicka Traneva
Title: *InterCriteria Analysis of Physicochemical Quality Indicators in Commercial Gasoline Samples*

Session MATHEMATICAL PHYSICS

18:00-18:30 Speaker: Polya Gueorguieva
Title: *Fostering Student Engagement and Experiential Learning at the STEM Center and Center for Cellular and Biomolecular Machines, UC Merced*

18:30-19:00 Speaker: Meglena Lazarova
Title: *Distributions of order k*
