
MASTER PROGRAM

for

**SEVENTEENTH INTERNATIONAL CONFERENCE
APPLICATION OF MATHEMATICS IN TECHNICAL AND NATURAL
SCIENCES
JUNE 24-29, 2025**

**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.**

FRIDAY, JUNE 27, 2025

Join Zoom Meeting **08:00-18:00**

<https://us02web.zoom.us/j/83157045195?pwd=IXg1ySg4gOFnsSGcXf0mfG58C9d6hV.1>

Meeting ID: 831 5704 5195

Passcode: 331729

Hosted by Michail Todorov

Flamingo Grand Hall

08:30-09:30 PLENARY TALK

Speaker: Nectarios Papanicolaou

Title: *Non-Self-Adjoint Sixth-Order Eigenvalue Problems*

Arising from Clamped Elastic Thin Films on Closed Domains

Coffee Break

10:00-12:00 Session MATHEMATICAL MODELLING IN ECONOMY
AND FINANCE

10:00-10:30 Speaker: Plamena Zlateva
Title: *A Modified Model of the Transportation Task with
Natural Disaster Risk Consideration*

10:30-11:00 Speaker: Silviya Assenova
Title: *Transport Safety - Methodology, Quantitative and
Qualitative Assessment of the Link Between Meteorological
Conditions and Safety*

11:00-11:30 Speaker: Slavi Georgiev
Title: *A Multicriteria Optimization Approach for Investment
Project Funding*

11:30-12:00 Speaker: Aleksander Baykin/Zlatin Dimitrov
Title: *Impact of Inequality in Income Distribution on
Population Happiness*

Lunch Break

14:00-14:45 KEYNOTE TALK

Speaker: Vesselin Gueorguiev
Title: *Reparametrization Invariant Scaling Symmetry as
Resolution of the Li-7 Problem within the BBNS*

15:00-16:00 Session MATHEMATICAL MODELLING IN ECONOMY
AND FINANCE

15:00-15:30 Speaker: Petar Peshev
Title: *Causal Relationship Between Bank Lending and Its
Determinants: Evidence from Bulgarian Commercial Banks
(2007-2024)*

15:30-16:00 Speaker: Radostina Stamenova
Title: *Panel Data Econometric Techniques for Modeling Bank*

*Loan Supply in Bulgaria: Evidence from 21 Commercial Banks
(2007-2024)*

Break

16:30-17:00	Speaker: Byulent Idirizov Title: <i>Application and Development of the Block Maxima Method in Analysis of Silver Price</i>
17:00-18:00	Session E-LEARNING
17:00-17:30	Speaker: Stoyan Tranev Title: <i>Bioeconophysical Science of Microeconomical Equilibrium of Stocks</i>
17:30-18:00	Speaker: Velichka Traneva Title: <i>Bioeconophysical Integrated Analysis of the Complex System Biosphere-Technosphere-Nosphere and the Role of Entropy and Albedo in System Sustainability</i>
19:00	Official Dinner – Bistro of Flamingo Grand Meeting point in the lobby of the Flamingo Grand hotel

Corella Hall

PARALLEL ZOOM SESSION

Join Morning 2 Zoom Meeting 10:00-17:30
<https://essex-university.zoom.us/j/92040184669>

Hosted by Georgi Grahovski

10:00-12:00	Special Session INTERDISCIPLINARY FRONTIERS
10:00-10:30	Speaker: Din Wang Title: <i>Dynamic Analysis of Aircraft Engine-Pylon Coupled System</i>
10:30-11:00	Speaker: Hongzhen Zhao Title: <i>Research on the Dynamics and Damping Performance of Parallel-Grounded Damping Nonlinear Energy Sink Cells</i>
11:00-11:30	Speaker: Yujiao Cui Title: <i>Vibration Control and Parameter Optimization of a Negative Stiffness Dynamic Vibration Absorber</i>
11:30-12:00	Speaker: Ziyu Guo Title: <i>Bifurcation of Periodic Solutions for a Multi-degree-of-freedom model of Resonator Metamaterials</i>
<hr/> Lunch Break <hr/>	
15:00-16:00	Special Session INTERDISCIPLINARY FRONTIERS
15:00-15:30	Speaker: Nuri Ma Title: <i>Low-frequency Vibration Attenuation in Metamaterial Beams with Embedded Inerters: Modeling and Dynamic Analysis</i>
15:30-16:00	Speaker: Liyi Ying Title: <i>Dual-Path Network-Based Brain Tumor CT Image Anomaly Detection System</i>
16:30-17:30	Special Session INTERDISCIPLINARY FRONTIERS
16:30-17:00	Speaker: Yuzhan Zhang Title: <i>Bifurcation of Periodic Solutions for a Cross-scale Oscillator Chain Model</i>
17:00-17:30	Speaker: Miao Wang Title: <i>Hypergraph Mamba-based Dual-channel Denoising</i>

Network for Session-based Recommendation

19:00

Official Dinner –Bistro of Flamingo Grand

Meeting point in the lobby of the Flamingo Grand hotel
