
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.**

SATURDAY, JUNE 28, 2025

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

<https://us02web.zoom.us/j/81434055350?pwd=zzDb2gwsTCozVMQtag9QQntlF6kkMj.1>

Meeting ID: 814 3405 5350

Passcode: 268886

Hosted by Michail Todorov

Flamingo Grand Hall

08:30-09:30 PLENARY TALK

Speaker: Runzhang Xu

Title: *Global Quantitative Stability of Wave Equations with
Strong and Weak Dampings*

Coffee Break

- 10:00-11:30 Session E-LEARNING
- 10:00-10:30 Speaker: Gleb Haynatzki
Title: *Probability Metrics for Kolmogorov-Arnold Net (KAN)*
- 10:30-11:00 Speaker: Dimitar Velev
Title: *The Synergy of Mathematics, Computer Science and Generative Artificial Intelligence*
- 11:00-12:00 Speaker: Marian Milev/ Dilyana Nikolova
Title: *A Model for Measuring the Economic Effects of Implementing Artificial Intelligence Technologies in Business Practices*

Lunch Break

- 14:00-14:45 KEYNOTE TALK
- Speaker: Andrejs Koliskin
Title: *Amplitude Evolution Equation for a Convective Flow Between Two Vertical Parallel Planes*
- 15:00-15:30 Session MATHEMATICAL PHYSICS
- 15:00-15:30 Speaker: Enrique Reyes
Title: *Equations in Infinitely Many Derivatives and the Zeta Function*
- Session NUMERICAL METHODS AND SCIENTIFIC COMPUTING
- 15:30-16:00 Speaker: Volodymyr Chumakov/Oxana Kharchenko
Title: *Equations in Infinitely Many Derivatives and the Zeta Function*

Break

- 16:30-17:00 Speaker: Tzvetan Ostromsky
Title: *Advanced Stochastic Techniques for Sensitivity Analysis in Large-Scale Air Quality Modeling*
- 17:00-17:30 Speaker: Tzvetan Ostromsky
Title: *Application of LiDAR and Photogrammetric Technologies for Imaging, Mapping and 3D Modeling of Underground Karst Objects -- Results from Experiments in the Cave Svirchovitsa near Karlukovo Village, NW Bulgaria*
- 17:30-18:00 Speaker: Dzhihan Menseidov
Title: *Stochastic Monte Carlo–FEM Prediction of Electrical Conductivity in Carbon-Nanoparticle/Polymer Composites for Green Technologies*
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Corella Hall

PARALLEL ZOOM SESSION

Join Morning 2 Zoom Meeting **10:00-12:00**
<https://essex-university.zoom.us/j/92040184669>

Hosted by Georgi Grahovski

- 10:00-10:30 Special Session INTERDISCIPLINARY FRONTIER
- 10:00-10:30 Speaker: Zhengrui Yang
Title: *Generative Adversarial Network with Vision Transformer for Pollen Grain Microscope Images Classification*
- 10:30-11:00 Speaker: Hongyuan Wang
Title: *A Privacy-preserving Scheme for External Security in Blockchain-based Federated Learning*

11:00-11:30

Speaker: Haoxuan Zhang

Title: *Structure-Aware and Consistency-Preserved Graph Contrastive Learning without Augmentation*

11:30-12:00

Speaker: Yaopeng Niu

Title: *Dynamic Characterization of Aircraft Propellers under Erosion Cracks*