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# 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.**

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**WEDNESDAY, JUNE 25, 2025**

## FLAMINGO GRAND HALL

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

<https://us02web.zoom.us/j/81725832504?pwd=QcabHvktYdEnVgDXeSjnJQ7iRXlPRz.1>

Meeting ID: 817 2583 2504

Passcode: 952290

Hosted by Michail Todorov

08:30-09:30      PLENARY SREAKER: Jianzhong Su  
                         Title *Brain Complex Data Analytics To Identify Epileptic  
                         Activity Sequences Based On EEG Source Localization*  
                         *Methods*

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09:30-10:00 BREAK

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10:00-11:00      Session MATHEMATICAL PHYSICS

10:00-10:30      Speaker: Bogdan Dimitrov

Title: *New Analytical Formulaes for the Weierstrass Invariants of Elliptic Integrals in the Weierstrass Form Depending on the Modulus Parameter  $q$  of the Integral in the Legendre Form*

10:30-11:00 Speaker: Georgi Grahovski  
Title: *Thermodynamic Properties of Quantum Spin Systems: Scaling and Disorder*

11:00-11:30 Speaker: Yuri Bozhkov  
Title: *An Analytic Investigation of the Emergence of a Secondary Diffusion in a Thin Film Model*,

11:30-12:00 Speaker: Mikhail Kolev  
Title: *On a Mathematical Model of Virus -- Immune System Competition*

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Lunch Break

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## **FLAMINGO GRAND HALL**

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14:00-14:45 KEYNOTE SPEAKER

Roumen Anguelov  
Title: *A Mathematical Model of CDK1 and APC Interactions in Cancer Cells: Exploring the Impact of Zingerone on Cell Proliferation*

Session NUMERICAL METHODS

15:00-15:30 Speaker: Alex Fedoseyev  
Title: *Turbulent Flow in Channel: Experiments versus Numerical Simulation and Analytical Solution*

15:30-16:00 Speaker: Alex Fedoseyev  
Title: *Critical Reynolds Number for Transition to Turbulence of*

*Viscous Flow in Channel*

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Coffee Break

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**FLAMINGO GRAND HALL**

16:30-18:30      Social Activity WOMAN'S PROGRAM