



深圳北理莫斯科大学

УНИВЕРСИТЕТ МГУ-ППИ В ШЭНЬЧЖЭНЕ  
SHENZHEN MSU-BIT UNIVERSITY

# 2024 SMIBU Sino- Russian Conference on Applied Mathematics

会议时间:2024年6月28-30日

地点:深圳北理莫斯科大学主楼336

主办单位:

深圳北理莫斯科大学计算数学与控制系;  
莫大-北理-深北莫应用数学联合研究中心

# 日程安排

**2024-06-28**

<b>June 28, Afternoon (16:00-18:00), Conference Room 301 of Main building</b>	
<b>15:00 – 18:00</b>	<b>Registration &amp; discussion</b>
<b>18:00 – 19:30</b>	<b>Dinner</b>

**2024-06-29**

<b>June 29, Moring (9:00-12:10), Conference Room 336 of Main building Chair: A. Ilin</b>		
<b>Time</b>	<b>Speaker</b>	<b>Title</b>
<b>9:00 - 9:20</b>	<b>A. Ilin</b>	<b>Opening remark</b>
<b>9:20 - 9:50</b>	<b>V. Zakharov</b>	<b>Automata with entangled transitions and the paradoxes of quantum physics</b>
<b>9:50 - 10:20</b>	<b>A. Maysuradze</b>	<b>Automation of an Iterative Approach to Retrieve a Collection of Relevant Documents</b>
<b>10:20 - 10:40</b>	<b>Tea and Coffee Break</b>	
<b>10:40 – 11:10</b>	<b>A. Nikitin</b>	<b>On integral equations arising in the model of logistic dynamics</b>
<b>11:10 - 11:40</b>	<b>A.Shcheglov Qing Shen</b>	<b>Итерационный метод решения обратной коэффициентной задачи для нелинейной модели динамики популяции</b>
<b>11:40 – 12:10</b>	<b>V.Plyutko V.Ternovski D.Kamzolkin</b>	<b>Control the Coefficient of a Pendulum Differential Equation as an Inverse Problem in Time</b>
<b>12:10 – 14:40</b>	<b>Lunch: Canteen 1, Floor 3</b>	
<b>June 29, Afternoon (14:00-18:00), Conference Room 336 of Main building Chair: Ye Zhang</b>		
<b>14:00-14:30</b>	<b>Junxin Guo</b>	<b>Seismic dispersion, attenuation, and frequency-dependent anisotropy in a fluid-saturated porous rock with intersecting fractures</b>

<b>15:00 – 15:30</b>	<b>Zeyu Liao</b>	<b>Convergence analysis of inner-iteration preconditioned GMRES method for least squares problems</b>
<b>15:30 - 16:00</b>	<b>Yongming Lu</b>	<b>An Efficient Method for Calculating Raypaths of First-Arrival Traveltimes in Anisotropic Media</b>
<b>16:00 - 16:20</b>	<b>Tea and Coffee Break</b>	
<b>16:20 - 16:50</b>	<b>Saravanakumar Ramasamy</b>	<b>Memory Sampled-data Control for Fuzzy Chaotic Systems: An Extended Looped Functional Approach</b>
<b>16:50 - 17:20</b>	<b>D.Chaikovskii</b>	<b>Asymptotic expansions method for the singularly perturbed stochastic partial differential equations.</b>
<b>17:20 - 17:50</b>	<b>A. Demin</b>	<b>Problems of foreign language learning and approaches to their solution</b>
<b>18:00 – 19:30</b>	<b>Dinner: Aolin hotel</b>	

**2024-06-30**

<b>June 30, Moring(9:00-12:15), Conference Room 336 of Main building Chair: Ye Zhang</b>		
<b>Time</b>	<b>Speaker</b>	<b>Title</b>
<b>9:00 - 9:30</b>	<b>Ye Zhang</b>	<b>An accelerated inexact Newton regularization scheme with a learned feature-selection rule for non-linear inverse problems</b>
<b>9:30 - 10:00</b>	<b>A. Ilin</b>	<b>TBA</b>
<b>10:00 - 10:30</b>	<b>I.Shevtsova</b>	<b>TBA</b>
<b>10:30 - 10:45</b>	<b>Tea and Coffee Break</b>	
<b>10:45 – 11:15</b>	<b>A. Sharov</b>	<b>Solution of the inverse problem of quasi-static elastography</b>
<b>11:15 - 11:45</b>	<b>P. Tochilin</b>	<b>On the use of ellipsoidal calculus methods for solving the time-optimal control problem using random trees, under kinodynamic constraints</b>
<b>11:45 - 12:15</b>	<b>O. Cherkasov</b>	<b>Maneuvers for selection a landing site with minimal fuel consumption</b>

<b>12:15 – 14:40</b>	<b>Lunch: in faculty</b>	
<b>June 30, Afternoon (15:00-18:00), Conference Room 336 of Main building</b>		
<b>Chair: Qing Zhou</b>		
<b>15:00-15:20</b>	<b>You Sun</b>	<b>A concentration preserving discontinuous Galerkin method for nonlinear multi-component chromatography models</b>
<b>15:20 –15:40</b>	<b>Ying-Ao Wang</b>	<b>On a class of linear regression methods</b>
<b>15:40 - 16:00</b>	<b>Tianxiang Tang</b>	<b>On the complexity of analysis and synthesis problems for parameterised automata</b>
<b>16:00 - 16:20</b>	<b>Tea and Coffee Break</b>	
<b>16:20 - 16:40</b>	<b>Qing Zhou</b>	<b>Application of 3D Gaussian Splatting in 3D reconstruction</b>
<b>16:40 - 17:00</b>	<b>Qing Shen</b>	<b>Inverse Coefficient Problem for a Nonlinear Population Development Model with Integral Features</b>
<b>17:00 - 17:20</b>	<b>Jiamian Li</b>	<b>A New Method For Analyzing Context-Free Languages Based On Directed Graphs</b>
<b>17:20 - 17:40</b>	<b>Jingyuan Mu</b>	<b>Construction and recognition of context-free expressions</b>
<b>17:40 – 18:00</b>	<b>Discussion</b>	