

Time	Thursday, October 4th
2:00 PM	<b>Opening remarks</b>
	<b>Chairman: Johannes Zimmer</b>
2:10 PM	<b>Varvara Turova</b> (TU München): <i>Some unfinished works of Nikolai Botkin</i>
2:35 PM	<b>Melinda Hagedorn, Florian Jarre</b> (Heinrich Heine Universität Düsseldorf): <i>Optimized convergence of stochastic gradient descent by weighted averaging</i>
3:00 PM	<b>Zhiming Chen</b> (Chinese Academy of Sciences, Peking): <i>High-order unfitted finite element methods: reliable realization and wave propagation</i>
3:25 PM	<b>Alexander Chebotarev, Nikolai Park, Pavel Mesenev</b> (Far Eastern Federal University, Vladivostok), <b>Andrey Kovtanyuk</b> (TU München): <i>An iterative algorithm for solving an initial-boundary value problem for a quasi-linear model of complex heat transfer</i>
3:50 PM	<b>Coffee Break</b>
	<b>Chairman: Varvara Turova</b>
4:05 PM	<b>Rubens Junqueira Magalhaes Afonso</b> (Instituto Tecnológico de Aeronáutica, Sao Paolo): <i>Provably safe robust trajectory planning among moving obstacles</i>
4:30 PM	<b>Alexey Golubev</b> (Ishlinsky Institute for Problems in Mechanics RAS, Moscow): <i>Trajectory planning for mechanical systems in the presence of dynamic obstacles</i>
4:55 PM	<b>Luis T. Aguilar</b> (Instituto Politécnico Nacional, Mexico), <b>Alejandra Ferreira de Loza</b> (CONACyT, Mexico), <b>Samy Gutierrez, Luis N. Coria</b> (Tecnologico Nacional de Mexico-Instituto Tecnológico de Tijuana, Mexico): <i>Tracking control of a cart-pendulum underactuated system around its vertical up position</i>
	<b>Wednesday, October 5th</b>
	<b>Chairman: Christina Kuttler</b>
10:00 AM	<b>Pavel Krejci</b> (Czech Technical University, Prague): <i>Breathing as an isothermal time-periodic process with gas exchange in a deformable porous medium</i>
10:25 AM	<b>Martin Brokate</b> (WIAS Berlin): <i>Strong stationarity for an optimal control problem for a rate independent evolution</i>
10:50 AM	<b>Hong Duong</b> (University of Birmingham), <b>Johannes Zimmer</b> (TU München): <i>On decompositions of non-reversible processes</i>
11:15 AM	<b>Thomas Lorenz</b> (RheinMain University of Applied Sciences, Wiesbaden): <i>Set-valued states for robust control problems</i>
11:40 AM	<b>Lunch Break</b>
	<b>Chairman: Renée Lampe</b>
1:30 PM	<b>Christoph Waterkamp</b> (University of Duisburg-Essen), <b>Tabea Vanessa von Kortzfleisch</b> (University of Münster), <b>Christoph Neu, Simo Kitanovski</b> (University of Duisburg-Essen), <b>S. Helene Richter</b> (University of Münster), <b>Daniel Hoffmann</b> (University of Duisburg-Essen): <i>Increasing information gain in animal research by improving statistical model accuracy</i>
1:55 PM	<b>Susmita Roy, Alexander T. D. Grünwald, Renée Lampe</b> (TU München): <i>Using polar coordinate a new mathematical concept for scoliosis assessment from a non-invasive body scanner</i>
2:20 PM	<b>Tom Fischer, Tobias Gerwald, Sabine Lajos, Sabine Woellert, Christina Kuttler</b> (TU München), <b>Joachim Draeger</b> (IABG mbH, München): <i>Modeling the influence of the information domain on countermeasure effectiveness in case of Covid-19</i>
2:45 PM	<b>Simon Strübbe, Irina Sidorenko, Alexander Grünwald, Renée Lampe</b> (TU München): <i>Semantic approach for solving the decision problem in natural language</i>
3:10 PM	<b>Coffee Break</b>
	<b>Chairman: Andrey Kovtanyuk</b>
3:25 PM	<b>Lubov Moroz, Tatyana Barabash, Anna Maslovskaya, Roman Britzskii</b> (Amur State University, Blagoveschensk): <i>Numerical simulation of polarization switching kinetics in ferroelectrics based on fractional Kolmogorov-Avrami model</i>
3:50 PM	<b>Reymart Salcedo Lagunero, Klemens Fellner</b> (University of Graz), <b>Thomas Apel</b> (Universität der Bundeswehr München): <i>Lipid hydrolysis: Modelling, analysis, and numerical simulations</i>
4:15 PM	<b>Juan J. Tapia, Roberto Arguelles</b> (Instituto Politécnico Nacional-CITEDI, Mexico), <b>María Cosío-León</b> (Universidad Politécnica de Pachuca, Mexico): <i>A GPU approach for ADI-based solution of 3D Burgers equation</i>
4:40 PM	<b>Mohamed Dalah</b> (University FMC-Constantine 1, Algeria), <b>Megrous Amar</b> (Ecole Supérieure de Comptabilité et de Finances à Constantine, Algeria): <i>Matlab implementation of the finite element method in electro-elasticity</i>

Time	Thursday, October 6th
	<b>Chairman: Mario Ayala</b>
10:00 AM	<b>Dmitry Savostyanov</b> (University of Essex), <b>Sergey Dolgov</b> (University of Bath): <i>Tensor product approach to epidemiological models on networks</i>
10:25 AM	<b>François Visconti</b> (École Nationale des Ponts ParisTech), <b>Christina Kuttler</b> (TU München): <i>Some insights about the qualitative behaviour of bacterial Quorum sensing gene regulation systems</i>
10:50 AM	<b>Fatiha Najm, Radouane Yafia</b> (Ibn Tofail University, Kenitra), <b>M. A. Aziz Alaoui</b> (Université Le Havre): <i>Periodic oscillations in oncolytic therapeutic model with viral lytic cycle</i>
11:15 AM	<b>Anna Maslovskaya</b> (Amur State University, Blagoveschensk), <b>Christina Kuttler</b> (TU München), <b>Yixuan Shuai</b> (Amur State University): <i>In silico studies of quorum sensing during bacterial growth: simulations by using COMSOL Multiphysics</i>
11:40 AM	<b>Lunch Break</b>
	<b>Chairman: Matthias Gerdts</b>
1:30 PM	<b>Dante Kalse</b> (Imperial College London): <i>Data-driven schemes for Hamilton-Jacobi-Bellman equations</i>
1:55 PM	<b>David Braun</b> (TU München): <i>Deep Q-learning-based worst-case analysis of complex automation functions</i>
2:20 PM	<b>Arseniy Spiridonov, Sergey Kumkov</b> (Krasovskii Institute of Mathematics and Mechanics, Ekaterinburg): <i>Cascade aircraft flows merging with multiple order changes</i>
2:45 PM	<b>Alexander Zwenig, Haichao Hong, Florian Holzapfel</b> (TU München): <i>Sensitivity of the energy balance of dynamic soaring</i>
3:10 PM	<b>Coffee Break</b>
	<b>Chairman: Rubens Afonso</b>
3:25 PM	<b>Matthias Gerdts</b> (Universität der Bundeswehr München): <i>Sensitivity analysis in model predictive control</i>
3:50 PM	<b>Tugba Akman, Florian Holzapfel</b> (TU München): <i>Sensitivity analysis for optimal eVTOL trajectories regarding uncertainties</i>
4:15 PM	<b>Anton Mikhailov, Sergey Kumkov</b> (Krasovskii Institute of Mathematics and Mechanics, Ekaterinburg): <i>Air-traffic controller and autopilot joint control of aircraft as mixed integer quadratic problem</i>
4:40 PM	<b>Suman Subedi, Barzin Hosseini</b> (TU München), <b>Johannes Diepolder</b> (Diepolder Dynamic Optimization GmbH, München), <b>Florian Holzapfel</b> (TU München): <i>Online parameter identification and optimal input design using perturbed nonlinear programming</i>
	<b>Friday, October 7th</b>
	<b>Chairman: Anna Maslovskaya</b>
10:00 AM	<b>Irina Bolodurina</b> (Orenburg State University), <b>Alexander Lositsky</b> (Fyodorov Eye Microsurgery Federal State Institution, Orenburg), <b>Evgeny Borshchuk</b> (Orenburg State Medical University of the Ministry Health), <b>Alexandra Voronina</b> (Fyodorov Eye Microsurgery Federal State Institution), <b>Lubov Grishina, Arthur Zhigalov</b> (Orenburg State University): <i>Intelligent system for automatic image description of optical coherence tomography</i>
10:25 AM	<b>Ilhame Amirali</b> (Düze University): <i>Numerical method for singularly perturbed Fredholm integro-differential equation involving boundary condition</i>
10:50 AM	<b>Andrey Kovtanyuk</b> (TU München), <b>Evgeni Marushchenko</b> (Far Eastern Federal University, Vladivostok), <b>Renée Lampe</b> (TU München): <i>The role of boundary conditions for modeling the blood flow in microvessels</i>
11:15 AM	<b>Bengisen Pekmen Geridonmez</b> (TED University, Ankara): <i>Statistical treatment to temperature gradient in case of discontinuous temperature boundary conditions in a triangular cavity</i>
11:40 AM	<b>Kirill Kuznetsov, Elena Amosova, Alexander Chebotarev</b> (Far Eastern Federal University, Vladivostok): <i>Solving the inverse problem of complex heat transfer using machine learning methods</i>
12:05 PM	<b>Closing remarks</b>

