



ALGORITHMY

Conference on Scientific Computing
— 15-20 March, 2024 —

Programme

Friday, March 15th

From 15.00	Check-in
16.00 – 19.00	Registration of participants
18.00 – 21.00	Dinner

Saturday, March 16th

7.00 – 8.45	Breakfast
8.50 – 9.00	Opening of the conference (Congress Hall, 8th floor) – <i>Karol Mikula</i>
9:00 – 10:40	Plenary lectures (Congress Hall, 8th floor) – <i>chairman Daniel Ševčovič</i>
9.00 – 9.50	Alfred M. Bruckstein - Seeing Things in Random Dot Videos
9.50 – 10.40	Christian Schmeiser - Mathematical models for actin driven cell motility
10.40 – 11.10	Coffee break (8th floor)

11.10 – 12.10 (12.30) [Parallel contributed sessions](#)

Session A ([Congress Hall, 8th floor](#)) – *chairman Christian Schmeiser*

11.10 – 11.30	G. Lupi - Understanding macrophage motion during wound healing: extraction of smooth velocities and analysis of randomness
11.30 – 11.50	B. Klug - Simulations of supersonic flows to study trajectories of aerosols and the impaction-based sampling efficiency on a rocket-borne particle collector
11.50 – 12.10	E. Kokavcová - On implicitly constituted fluids with implicitly constituted boundary conditions

Session B ([Blue Hall, 7th floor](#)) – *chairman Laura Grigori*

11.10 – 11.30	M. Rozložník - Iterated Gauss-Seidel GMRES
11.30 – 11.50	S. Pozza - A fast numerical method for the operator solution of the generalized Rosen-Zener model
11.50 – 12.10	S. Potter - Fast hierarchical low-rank view factor matrices for thermal irradiance on planetary surfaces
12.10 – 12.30	J. Kružík - Preconditioned active set algorithm for quadratic programming

Session C ([Conference room, 11th floor](#)) – *chairman Clement Cancés*

11.10 – 11.30	L. Jakabčin - A percolation model for numerical simulation of non-reactive impregnation in porous media
11.30 – 11.50	M. Slodička - Evolutionary PDEs with Volterra operators: direct and inverse source problems
11.50 – 12.10	M. Béréš - Parameter fitting using Bayesian inversion assisted by neural network surrogate model
12.10 – 12.30	Y. Saleh - Augmenting spectral methods with invertible neural networks and application to quantum molecular physics

Session D (Conference room, 5th floor) – chairman Michal Beneš

- 11.10 – 11.30 J. Vala - Computational smeared damage in the macroscopic analysis of quasi-brittle materials and structures
- 11.30 – 11.50 V. Kozák - Crack propagation modelling using XFEM and numerical problems, building materials applications
- 11.50 – 12.10 V. Kučera - Convergence of the finite element method on extremely deformed meshes

12.10 (12.30) – 14.00 Lunch

14.00 – 16.00 Parallel sessions

Session A (Congress Hall, 8th floor) – session on Numerical, analytical, experimental, and image processing approaches to combustion, flame propagation, and evolution of interfaces – chairman Shigetoshi Yazaki

- 14.00 – 14.30 S. Yazaki - Image segmentation and its application to track a flame/smoldering front in combustion
- 14.30 – 15.00 M. Ambroz - Applications of data assimilation in forest fire propagation modeling
- 15.00 – 15.30 S. Miyashita - Unstable behavior of concurrent flame spread in a narrow channel
- 15.30 – 16.00 H. Izuohara - Instability analysis of planar wave in a combustion model

Session B (Blue Hall, 7th floor) – session on Structure-preserving finite element methods for computational fluid dynamics – chairman Dmitri Kuzmin

- 14.00 – 14.30 A. Rupp - Limiter-based entropy stabilization of semi-discrete and fully discrete schemes for nonlinear hyperbolic problems
- 14.30 – 15.00 J. Chan - Enforcing cell entropy inequalities using subcell limiting
- 15.00 – 15.30 A. Rueda-Ramirez - Monolithic convex limiting for Legendre–Gauss–Lobatto discontinuous Galerkin spectral element methods
- 15.30 – 16.00 S. Faghieh-Naini - A quadrature-free p-adaptive discontinuous Galerkin discretization for the shallow water equations

Session C (Conference room, 11th floor) – session on Modelling and simulation of flow, reactive transport and deformation in porous media – chairman Iuliu Sorin Pop

- 14.00 – 14.30 I. S. Pop - Linear iterative schemes for degenerate parabolic problems
- 14.30 – 15.00 M. A. Khan - An iterative scheme for the stochastic Stefan problem
- 15.00 – 15.30 K. Mitra - Robust time-discretization, linearization and adaptive algorithms for coupled problems in porous media
- 15.30 – 16.00 M. Berardi - Modeling root water uptake activity in the unsaturated water flow framework

Session D (Conference room, 5th floor) – session on Numerical linear algebra in PDEs – chairman Conor McCoid

- 14.00 – 14.30 M. Outrata - HAM: Hierarchical approximate maps for updating preconditioners
- 14.30 – 15.00 J. Papež - Algebraic error in adaptive finite element method
- 15.00 – 15.30 E. de Sturler - Sketching and recycling GMRES for a sequence of PDE solves
- 15.30 – 16.00 H. Ringer - Shape from sound: the inverse Laplacian eigenvalue problem

16:00 – 16:30 Coffee break (8th floor)

16.30 – 18.30 (19.00) Parallel sessions

Session A (Congress Hall, 8th floor) – session on Numerical, analytical, experimental, and image processing approaches to combustion, flame propagation, and evolution of interfaces – *chairman Shigetoshi Yazaki*

- 16.30 – 17.00 S. Kobayashi - Mathematical modeling and simulations to flame spreading on an accordion folded paper
- 17.00 – 17.30 R. Straka - Application of LBM in the modeling of combustion
- 17.30 – 18.00 K. Matsue - Nonlinear dynamics of hydrodynamically unstable premixed flames with physicochemical interactions
- 18.00 – 18.30 J. Hahn - The G-equation on polyhedral meshes

Session B (Blue Hall, 7th floor) – session on Structure-preserving finite element methods for computational fluid dynamics – *chairman Andreas Rupp*

- 16.30 – 17.00 D. Kuzmin - Dissipation-based WENO stabilization for high-order finite element discretizations of hyperbolic problems
- 17.00 – 17.30 J. Vedral - Strongly consistent low-dissipation WENO schemes for finite elements

Session B (Blue Hall, 7th floor) – session on Numerical methods for nonlinear hyperbolic problems – *chairman Peter Frolkovič*

- 17.30 – 18.00 X. Nogueira - Machine learning approaches to improve WENO schemes
- 18.00 – 18.30 R. Loubere - A multi-dimensional aware Godunov method on unstructured mesh in 3D

Session C (Conference room, 11th floor) – session on Modelling and simulation of flow, reactive transport and deformation in porous media – *chairman Iuliu Sorin Pop*

- 16.30 – 17.00 C. Rodrigo - Oscillation-free numerical scheme for the Biot's model
- 17.00 – 17.30 J. Kraus - Fixed-stress method for a class of nonlinear poroelasticity problems
- 17.30 – 18.00 J. Stockie - A multi-scale model for freeze/thaw-induced pressure generation in maple trees
- 18.00 – 18.30 D. Trucu - Computational multiscale modelling of glioblastoma growth and spread within fibrous brain environment

Session D (Conference room, 5th floor) – session on Numerical linear algebra in PDEs – *chairman Michal Outrata*

- 16.30 – 17.00 M. Boutilier - Robust Methods for Multiscale Coarse Approximations in Perforated Domains
- 17.00 – 17.30 C. McCoid - Adaptively optimised transmission conditions in Schwarz methods
- 17.30 – 18.00 L. Lu - Time domain decomposition methods for parabolic optimal control problems
- 18.00 – 18.30 N. Bootland - Multipreconditioning with Domain Decomposition for High-Frequency Helmholtz Problems
- 18.30 – 19.00 K. Patil - Steklov properties of the Helmholtz operator in the plane

18.30 – 21.00 Dinner

21.00 – 24.00 Poster and beer session ([Halla Grande, 5th floor](#))

Posters:

- K. Zhang - Image Segmentation with Shape Compactness Regularization
- S. Hajjighasemi - An improved Frankot and Chellappa method for surface normal integration using fuzzy concepts
- A. Handlovičová - Numerical scheme for AMSS model based on the finite volume method
- Z. Minarechová - Solving the fixed gravimetric boundary value problem using mapped infinite elements
- D. Žáková - Numerical solution of two-dimensional scalar conservation laws using compact implicit WENO scheme
- K. Lacková - Novel compact schemes for advection equation: Employing inverse Lax-Wendroff procedure
- G. Lupi - Harmonic velocity vector field reconstruction from sparse samples by triple-Laplacian
- M. Boutilier - Trefftz approximation space for the Poisson equation in perforated domains
- L. Tomek - Segmentation of planar point clouds using evolving curves
- A. Köhler - An experimental analysis of the K-SVD algorithm
- R. Čunderlík - 3D high-resolution numerical modelling of altimetry-derived marine gravity data using FVM
- M. Žeravý - Well-balanced compact implicit numerical scheme for the shallow water equations with topography
- K. A. Allaly - Automatic path extraction inside the aorta from CT data
- M. Húska - Quaternary image decomposition with cross-correlation-based multi-parameter selection
- R. Straka - Bloody LBM: bypass grafts simulation tool
- H. Ringer - Shape from sound: The inverse Laplacian eigenvalue problem
- G. Ibolya - Geometric interpretation and universal limiting of semi-implicit, fully discrete schemes for linear advection

Sunday, March 17th

- 7.00 – 8.55** **Breakfast**
- 9.00 – 10.40** Plenary lectures ([Congress Hall, 8th floor](#)) – *chairman Miroslav Rozložník*
- 9.00 – 9.50 Laura Grigori - Randomization techniques for solving linear systems of equations and eigenvalue problems
- 9.50 – 10.40 Clement Cancés - Finite volumes for a generalized Poisson-Nernst-Planck system with cross-diffusion and size exclusion
- 10.40 – 11.10** **Coffee break ([8th floor](#))**
- 11.10 – 12.10** **Parallel sessions**
- Session A ([Congress Hall, 8th floor](#)) – session on Advanced numerical methods for dissipative systems – *chairman Simon Lemaire***
- 11.10 – 12.10 R. Eymard - Approximations of linear elliptic problems with irregular data on general simplicial grids
- Session B ([Blue Hall, 7th floor](#)) – session on New trends in model order reduction and learning – *chairman Mario Ohlberger***
- 11.10 – 11.40 M. Hess - Electric field predictions using physics-informed neural networks
- 11.40 – 12.10 T. Wenzel - Deep kernels via invertible neural networks
- Session C ([Conference room, 11th floor](#)) – session on Parallel in time methods for High-Performance Computing – *chairman Christian Engwer***
- 11.10 – 11.40 C. Engwer - Hardware-aware numerics and parallel in time concepts
- 11.40 – 12.10 S. Götschel - Parareal with physics-informed neural operators as coarse propagator
- Session D ([Conference room, 5th floor](#)) – session on Computational methods for finance and energy markets – *chairman Matthias Ehrhardt***
- 11.10 – 11.40 D. Ševčovič - Maximal monotone operator technique for solving Hamilton-Jacobi-Bellman equations arising in optimal portfolio selection problem
- 11.40 – 12.10 C. I. Udeani - Learning the solution operator of Hamilton Jacobi Bellman equations using physics-informed DeepONets
- 12.10 – 14.00** **Lunch**

14.00 – 16.00 Parallel sessions

Session A (Congress Hall, 8th floor) – session on Scientific machine learning: algorithms and applications – *chairman Alena Kopaničáková*

- 14.00 – 14.30 S. Pezzuto - Machine learning for precision cardiology
- 14.30 – 15.00 A. A. Ožvat - Natural Numerical Network – forward-backward diffusion on directed graphs for supervised image classification
- 15.00 – 15.30 K. Brenner - Learning local Dirichlet-to-Neumann maps of nonlinear elliptic PDEs with rough data
- 15.30 – 16.00 E. Centofanti - Towards operator learning for ionic models in biomathematics

Session B (Blue Hall, 7th floor) – session on Numerical methods for nonlinear hyperbolic problems – *chairman Stephane Clain*

- 14.00 – 14.30 C. Parés - Recent advances in well-balanced methods for systems of conservation laws
- 14.30 – 15.00 P. Frolkovič - Compact implicit schemes for hyperbolic problems
- 15.00 – 15.30 F. Vilar - Monolithic DG/FV domain preserving scheme for hyperbolic PDEs
- 15.30 – 16.00 Y. Liu - Active flux like method for designing well-balanced schemes for shallow water models

Session C (Conference room, 11th floor) – session on Parallel in time methods for High-Performance Computing – *chairman Christian Engwer*

- 14.00 – 14.30 W. Drews - Optimizing FE-Multigrid methods for convection-diffusion equations via space-time parallelization
- 14.30 – 15.00 J. Dünnebacke - Space-time multigrid methods for convection-diffusion equations arising from flow problems
- 15.00 – 15.30 Ch. Lohmann - Augmented Lagrangian acceleration of Global-In-Time Oseen solvers
- 15.30 – 16.00 T. Lunet - Direct Parallel-in-Time method based on spectral deferred correction

Session D (Conference room, 5th floor) – session on Computational methods for finance and energy markets – *chairman Daniel Ševčovič*

- 14.00 – 14.30 C. Vázquez - Modelling and numerical methods for pricing in renewable energy certificate markets
- 14.30 – 15.00 L. Kaplani - Differential deep learning-based algorithm for solving high-dimensional nonlinear backward stochastic differential equations
- 15.00 – 15.30 M. Trnovská - Path-based data envelopment analysis models with direction defined using the anti-ideal point
- 15.30 – 16.00 J. Hrdina - Multiplier form of the path-based data envelopment analysis models and a single-stage approach for finding an efficient target

16.00 – 16.30 Coffee break (8th floor)

16.30 – 18.30 (19:00) Parallel sessions

Session A (Congress Hall, 8th floor) – session on Scientific machine learning: algorithms and applications – *chairman S. Pezzuto*

- 16.30 – 17.00 A. Kopaničáková - Multilevel minimization and machine learning
- 17.00 – 17.30 H. Kothari - Nonlinear preconditioning for training of physics-informed neural networks
- 17.30 – 18.00 P. Novello - Towards instance-dependent approximation guarantees for scientific machine learning using Lipschitz neural networks
- 18.00 – 18.30 M. Weiser - Active learning of Gaussian process regression surrogates from simulated training data
- 18.30 – 19.00 M. Takáč - PhysicsML: Harnessing the power of AI in technology development

Session B (Blue Hall, 7th floor) – session on Numerical methods for nonlinear hyperbolic problems – *chairman Raphael Loubere*

- 16.30 – 17.00 S. Preda - A new algorithm for surface reconstruction using a semi-Lagrangian scheme with local interpolator
- 17.00 – 17.30 V. Michel-Dansac - CFL-less and parallel kinetic relaxation schemes for systems of balance laws; application to electromagnetism
- 17.30 – 18.00 A. Iollo - Some numerical models for multi-material interaction in compressible or incompressible regimes
- 18.00 – 18.30 S. Chiocchetti - Hyperbolic viscous flow using quaternion fields
- 18.30 – 19:00 S. Clain - Compact schemes in time for hyperbolic problems: the R-block method

Session C (Conference room, 11th floor) – session on Parallel in time methods for High-Performance Computing – *chairman Christian Engwer*

- 16.30 – 17.00 R. Falgout - Parallel-in-Time solution of systems of linear and nonlinear hyperbolic PDEs
- 17.00 – 17.30 D. Palitta - A new ParaDiag time-parallel time integration method
- 17.30 – 18.00 L. Wimmer - Applying spectral deferred corrections to differential-algebraic equations
- 18.00 – 18.30 Ch. L. Alappat - Performance optimization of sparse iterative solvers using temporal cache blocking

Session D (Conference room, 5th floor) – session on Computational methods for finance and energy markets – *chairman Matthias Ehrhardt*

- 16.30 – 17.00 I. Melicherčík - Parental bonus in pension systems
- 17.00 – 17.30 K. Debrabant - Weak second-order stochastic Runge-Kutta methods with optimal stage number
- 17.30 – 18.00 N. B. Renani - A Comparison Study of ADI and ADE Methods of the Black-Scholes equation on option pricing Models
- 18.00 – 18.30 M. Padyšák - The role of volatility in guaranteed bond funds
- 19.00 – 21.00 Dinner**

Monday, March 18th

Complementary activities of the ALGORITMY conference

Skiing in Jasna

7.00 – 8.15	Breakfast, participants take lunch in a packet from baskets in breakfast room
8.30	Departure of the conference bus to Jasna
9.15 – 16.00	Renting equipment and skiing in Jasna
16.15	Departure of the conference bus from Jasna
17.00 – 21.30	Permon's Paradise

Visit of Liptov's village museum in Pribylina

7.00 – 9.30	Breakfast
9.45	Departure of the conference bus to Pribylina
10.00 – 12.00	Museum visit
12.15 – 14.00	Lunch
14.00 – 21.30	Permon's Paradise

18.00 – 21.00 Dinner

Tuesday, March 19th

7.00 – 8.25 **Breakfast**

8.30 – 10.00 **Parallel sessions**

Session A (Congress Hall, 8th floor) – session on Numerical methods for level-set and eikonal equations – theory and applications – *chairman Jooyoung Hahn*

8.30 – 9.00 L. Cohen - Fast marching and front propagation for image segmentation

9.00 – 9.30 S. Tozza - Level-set method in Image Processing and 3D printing problems

9.30 – 10.00 N. Požár - Level set method for the crystalline mean curvature flow with forcing

Session B (Blue Hall, 7th floor) – session on Numerical methods for convection-dominated problems – *chairman Volker John*

8.30 – 9.00 P. Knobloch - Algebraic stabilizations of convection-diffusion problems and their convergence on general meshes

9.00 – 9.30 M. P. Bruchhäuser - Investigation of the dual weighted residual method for convection-dominated problems

9.30 – 10.00 H. Ranocha - Energy-preserving numerical methods for some dispersive shallow water models (Online)

Session C (Conference room, 11th floor) – session on Advanced numerical methods for dissipative systems – *chairman Maxime Herda*

8.30 – 9.00 M. Bessemoulin-Chatard - Discrete hypocoercivity for a nonlinear kinetic reaction model

9.00 – 9.30 S. Lemaire - High-order polyhedral methods for eddy current testing simulation

9.30 – 10.00 A. Zurek - Analysis of a numerical scheme for a nonlocal cross-diffusion system

Session D (Conference room, 5th floor) – session on Computational methods and algorithms for biomedical applications – *chairman Jurjen Duintjer Tebbens*

8.30 – 9.00 E. Friedmann - Pharmacological models and numerical algorithms for the refinement of therapeutic approaches for retinal diseases

9.00 – 9.30 M. Pires - Localized numerical stabilization based on conformation tensor spectrum for viscoelastic fluids flows simulations

9.30 – 10.00 M. Kyed - Unconstrained steady motion of a droplet in a two-phase flow

10.00 – 10.30 **Coffee break (8th floor)**

10.30 – 12.00 **Parallel sessions**

Session A (Congress Hall, 8th floor) – session on Numerical methods for level-set and eikonal equations – theory and applications – *chairman Karol Mikula*

10.30 – 11.00 J. Hahn - Eikonal boundary condition for level set method

11.00 – 11.30 M. Macák - Earth gravity field modelling by using eikonal type boundary condition

11.30 – 12.00 S. Potter - Jet marching on unstructured meshes: algorithms and applications

Session B (Blue Hall, 7th floor) – session on Numerical methods for convection-dominated problems – chairman Petr Knobloch

- 10.30 – 11.00 V. John - On using machine learning techniques for the numerical solution of convection-diffusion problems
- 11.00 – 11.30 M. Vohralík - Guaranteed and robust L2-norm a posteriori error estimates for 1D linear advection(-reaction) problems
- 11.30 – 12.00 J. Novo - Second order bounds in time for POD-ROM methods for the Navier-Stokes equations

Session C (Conference room, 11th floor) – session on Advanced numerical methods for dissipative systems – chairman Simon Lemaire

- 10.30 – 11.00 H. Mizerová - Convergent numerical schemes for compressible fluid flow models
- 11.00 – 11.30 J. Moatti - An arbitrary-order entropic method for structure-preserving approximations of advection-diffusion
- 11.30 – 12.00 S. Bonetti - Numerical modeling of wave propagation phenomena in thermo-poroelastic media via discontinuous Galerkin methods

Session D (Conference room, 5th floor) – session on Computational methods and algorithms for biomedical applications – chairman Elfriede Friedmann

- 10.30 – 11.00 J. D. Tebbens - Oscillations in diffusion-driven gene regulatory networks for nuclear receptors
- 11.00 – 11.30 M. Zagórski - Formation of gene expression patterns in developing spinal cord
- 11.30 – 12.00 T. Bodnár - On the estimation of blood hemolysis index from viscoelastic stretch model

12.00 – 14.00 Lunch

14.00 – 16.00 Parallel sessions

Session A (Congress Hall, 8th floor) – session on Model and data-driven algorithms in imaging – chairman Martin Hůska

- 14.00 – 14.30 V. Stergiopoulou - Inverse problems in microscopy: theory and application to different microscopy modalities
- 14.30 – 15.00 M. Kollár - Mathematical models for the segmentation of protected habitats from satellite images in NaturaSat software
- 15.00 – 15.30 S. A. Park - Segmentation-based cell tracking and its application to macrophage videos
- 15.30 – 16.00 M. Lazzaretti - Off-the-grid regularisation for Poisson inverse problems

Session B (Blue Hall, 7th floor) – session on New Trends in Model Order Reduction and Learning – chairman Tizian Wenzel

- 14.00 – 14.30 M. Ohlberger - Model reduction and learning for PDE constrained optimization
- 14.30 – 15.00 J. Schleuß - Training and enrichment based on a residual localization strategy
- 15.00 – 15.30 L. Renelt - Model order reduction techniques for reactive transport problems
- 15.30 – 16.00 A. Riekert - New approaches in operator learning for parametric PDEs

Session C (Conference room, 11th floor) – session on Interface motion in complex systems – *chairman Shigetoshi Yazaki*

- 14.00 – 14.30 M. Beneš - Mathematical modeling of freezing inception in a porous medium
- 14.30 – 15.00 K. Tomoeda - A mathematical treatment of the bump structure of particle-laden flows with particle features
- 15.00 – 15.30 P. Strachota - Numerical simulation of water freezing in a 3D container filled with glass beads
- 15.30 – 16.00 M. Jex - Modeling of freezing/thawing front propagation in porous media by the method of finite elements

16.00 – 16.30 Coffee break (8th floor)**16.30 – 18.30 Parallel sessions****Session A (Congress Hall, 8th floor) – session on Model and data-driven algorithms in imaging – *chairman Martin Húska***

- 16.30 – 17.00 S. Crisci - A bilevel learning approach for blind deconvolution (Online)
- 17.00 – 17.30 G. Franchini - Bilevel optimization with a no-reference image statistics based score-predictor loss
- 17.30 – 18.00 M. Pragliola - Sparse recovery problem in a hierarchical Bayesian framework
- 18.00 – 18.30 L. Ratti - Unrolling with microlocal corrections meets proximal operator learning: a hybrid regularization algorithm for Limited Angle Computed Tomography

Session B (Blue Hall, 7th floor) – session on New Trends in Model Order Reduction and Learning – *chairman Mario Ohlberger*

- 16.30 – 17.00 M. Nonino - ALE based MOR for transport dominated problems: calibration, optimization and regression
- 17.00 – 17.30 H. Kleikamp - Be greedy and learn: efficient and certified algorithms for parametrized optimal control problems
- 17.30 – 18.00 H. Mu - Piece-wise symplectic model reduction on quadratically embedded manifolds
- 18.00 – 18.30 J. Nicodemus - Inferring passive realizations from frequency data via spectral factorization

Session C (Conference room, 11th floor) – session on Interface motion in complex systems – *chairman Michal Beneš*

- 16.30 – 17.00 Sh. Yazaki - Structure-preserving numerical scheme for interfacial equations
- 17.00 – 17.30 J. F. Rabago - Obstacle detection in Stokes fluid flow using a novel shape optimization approach
- 17.30 – 18.00 M. Kolář - On diffusion and transport mechanism on evolving space curves
- 18:00 – 18:30 M. Narayanan - Applications of constrained forced curvature flow

19.45 – 01.00 Conference dinner (Halla Grande – 5th floor) with Slovak food and wines, music and dancing

Wednesday, March 20th

7.00 – 9.25	Breakfast
9.30 – 11.50	Plenary lectures (Congress Hall, 8th floor) – <i>chairman Mario Ohlberger and Alena Kopaničáková</i>
9.30 – 10.20	Gabriella Puppo - Large time steps for stiff balance laws
10.20 – 11.00	Coffee break (8th floor) and Check-out
11.00 – 11.50	Xue-Cheng Tai - PottsMGNet: A mathematical explanation of encoder-decoder based neural networks (Online)
12.00 – 13.00	Lunch
13.00 – 13.30	Conference bus departure