

Program

(In Beijing Time)

July 9 (Sunday)

14:30--15:00 Opening (Chair: Yang Cao)

15:00--18:00 Invited Plenary Talks (Chair: Hua Dai)

15:00--15:45 Mikhail I. Karyakin:

On Determining the Constitutive Parameters of the Highly Elastic Materials Using Evolutionary Algorithms

15:45--16:30 Zhong-Zhi Bai:

On Convergence Rates of Kaczmarz-Type Methods with Different Selection Rules of Working Rows

16:30--17:15 Yuri V. Vassilevski:

Stable Numerical Schemes for Modelling Hemodynamic Flows in Time-Dependent Domains

17:15--18:00 Galina V. Muratova:

Numerical Solution of Large Generalized Eigenvalue Problems by Shift-and-Invert Lanczos Method

18:00--20:30 Dinner

20:30--22:00 Invited Plenary Talks (Chair: Galina V. Muratova)

20:30--21:15 Andrey V. Nasedkin:

About Finite Element Technique of Efficiency Analysis of Ultrasonic Transducers Made of Composite Piezoceramics in Acoustic Medium

21:15--22:00 Konstantin A. Nadolin:

Hydrodynamics and Mass Transfer in Long Natural Streams: Mathematical Models and Computational Perspectives

July 10 (Monday)

- 09:00--12:00** Invited Plenary Talks (Chair: Zhong-Zhi Bai)
- 09:00--09:45** Hua Dai:
Global Rational Krylov Subspace Method for Solving Large-Scale Lyapunov Equations
- 09:45--10:30** Yang Cao:
Accelerated Modulus-Based Matrix Splitting Iteration Methods for Mixed-Size Cell Circuits Legalization
- 10:30--11:15** Zhi-Ru Ren:
Randomized Methods of Matrix Decompositions and Its Applications
- 11:15--12:00** Kang-Ya Lu:
Optimal Rotated Block-Diagonal Preconditioning for Discretized Optimal Control Problems Constrained with Fractional Time-Dependent Diffusive Equations
- 12:00--15:00** Lunch
- 15:00--18:00** Invited Plenary Talks (Chair: Mikhail I. Karyakin)
- 15:00--15:45** Rostislav D. Nedin:
Concerning Modeling and Identification of Prestress Fields in Elastic Bodies
- 15:45--16:30** Pavel A. Oganessian:
Computational Modules for Material Properties Identification in ACELAN-COMPOS Finite Element Package
- 16:30--17:15** Kirill M. Terekhov:
Linear System Solution Methods for Coupled Multiphysics Problems
- 17:15--18:00** Sergey B. Sorokin:
An Implicit Iterative Method for Solving an Inverse Boundary Value Problem for an Elliptic Equation
- 18:00--20:30** Dinner

July 11 (Tuesday)

09:00--12:00 Invited Plenary Talks (Chair: Zhi-Ru Ren)

09:00--09:45 Ken Hayami:

GMRES Methods for Tomographic Reconstruction with an Unmatched Back Projector

09:45--10:30 Yu-Jiang Wu:

A Minimum Residual Modified HSS Iteration Method for a Class of Complex Symmetric Linear Systems

10:30--11:15 Yu-Mei Huang:

Rank Minimization with Applications to Image Restoration

11:15--12:00 Zheng-Da Huang:

An Inexact Block Factorization Preconditioner for Incompressible Navier-Stokes Equations

12:00--15:00 Lunch

15:00--18:00 Invited Plenary Talks (Chair: Yu-Jiang Wu)

15:00--15:45 Jian-Jun Zhang:

A Block Preconditioner for Double Saddle Point Systems Arising from Liquid Crystal Directors Modeling

15:45--16:30 Xue-Yuan Tan:

A Block Kaczmarz Algorithm for Solving Large Linear Systems

16:30--17:15 Hao Liu:

Numerical Methods for Solving Fractional Eigenvalue Problems

17:15--17:20 Break

17:20--18:00 Contributed Talks (Chair: Yang Cao)

17:20--17:40 Wen-Ting Wu:

On Convergence of the Partially Randomized Extended Kaczmarz Method

17:40--18:00 Lu Wang:

On Relaxed Greedy Randomized Augmented Kaczmarz Methods for Solving Large Sparse Inconsistent Linear Systems

18:00--20:30 Dinner

July 12 (Wednesday)

09:00--12:00 Meeting (Chairs: Yang Cao, Yu-Mei Huang)

09:00--10:30 Preconditioning and Iterative Techniques with Applications

10:30--10:40 Break

10:40--12:00 Randomization and Projection Methods

12:00--15:00 Lunch

15:00--18:00 Discussion (Chairs: Yang Cao, Zheng-Da Huang)

15:00--16:30 Fast Solutions of Discretized Partial Differential Equations

16:30--16:40 Break

16:40--18:00 Optimal Control Problems with PDE Constraints

18:00--20:30 Dinner