

Program

July 21 (Friday)

15:00-18:00 Registration

July 22 (Saturday)

- 9:00-9:30** **Opening and Photo** **Chair: Xiao-Xia Guo**
- 9:30-10:15** **Invited Plenary Talk** **Chair: Zhong-Zhi Bai**
- 9:30-10:15** **Yang Cao**
Accelerated Modulus-Based Matrix Splitting Iteration Methods for Mixed-Size Cell Circuits Legalization
- 10:15-10:25** **Tea Break**
- 10:25-11:55** **Invited Plenary Talks** **Chair: Hua Dai**
- 10:25-11:10** **Qing-Wen Wang**
Making Linear Algebra Easier to Teach and Learn
- 11:10-11:55** **Yu-Hong Ran**
Block-Circulant with Circulant-Block Preconditioners for Two-Dimensional Spatial Fractional Diffusion Equations
- 12:00-13:30** **Lunch**
- 14:30-16:10** **Contributed Talks** **Chair: Li-Li Zhang**
- 14:30-14:55** **Fu-Rong Lin**
Fractional Centered Difference Schemes and Banded Preconditioners for Nonlinear Riesz Space Variable-Order Fractional Diffusion Equations
- 14:55-15:20** **Li Wang (Hunan)**
The New Solution Bounds of the Discrete Algebraic Riccati Equation and Their Applications in Redundant Control Inputs Systems
- 15:20-15:45** **Yu-Mei Huang**
TV Regularized Method for Multivariate Time Series Segmentation
- 15:45-16:10** **Kang-Ya Lu**
An Economic Implementation of the Optimal Rotated Block-Diagonal Preconditioning Method

16:10-16:20 Tea Break

16:20-18:25 Contributed Talks Chair: Yu-Mei Huang

16:20-16:45 Li-Li Zhang

Modulus-Based Multigrid Methods for Linear Complementarity Problems

16:45-17:10 Ai-Li Yang

Multi-Parameter Dimensional Split Preconditioner for Three-by-Three Block System of Linear Equations

17:10-17:35 Sheng-Xin Zhu

Importance of Matrix Computing Education in the AI Era

17:35-18:00 Lu Wang

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

18:00-18:25 Jian-Hua Zhang

On Maximum Residual Nonlinear Kaczmarz-Type Algorithms for Large Nonlinear Systems of Equations

18:30-19:30 Dinner

July 23 (Sunday)

9:30-10:15 Invited Plenary Talk Chair: Gang Wu

9:30-10:15 Min-Li Zeng
Matrix-Splitting Iterative Methods for Nonlinear Saddle-Point Problems from Optimization Problems

10:15-10:25 Tea Break

10:25-11:55 Invited Plenary Talks Chair: Zhi-Ru Ren

10:25-11:10 Lu Lin
The Practice and Reflection of Linear Algebra Course Teaching

11:10-11:55 Chang-Jiang Bu
The Matrices, Tensors, the Spectra of Graphs and Hypergraphs

12:00-13:30 Lunch

14:30-16:10 Contributed Talks Chair: Jian-Jun Zhang

14:30-14:55 Lu-Xin Wang
Modulus-Based Matrix Splitting Iteration Methods for Horizontal Quasi-Complementarity Problem

14:55-15:20 Ting-Ting Feng
Randomized Kaczmarz Method for Solving Large-Scale Sylvester Matrix Equations

15:20-15:45 Xian-Ping Wu
Sharp Error Bounds of the Extended Vertical Linear Complementarity Problem

15:45-16:10 Fang Chen
Improved Splitting Preconditioner for Double Saddle Point Problems Arising from Liquid Crystal Director Modeling

16:10-16:20 Tea Break

- 16:20-18:00** **Contributed Talks** **Chair: Fu-Rong Lin**
- 16:20-16:45** **Zhao-Zheng Liang**
Fast Rotated SOR Method for Block Two-by-Two Linear Systems with Application to PDE-Constrained Optimal Control Problems
- 16:45-17:10** **Yue-Hua Feng**
On Computing HITS ExpertRank via Lumping the Hub Matrix
- 17:10-17:35** **Chen-Can Zhou**
A Modified Newton-Based Matrix Splitting Iteration Method for Generalized Absolute Value Equations
- 17:35-18:00** **Li-Li Xing**
A Class of Pseudoinverse-Free Greedy Block Nonlinear Kaczmarz Methods for Nonlinear Systems of Equations
- 18:10-20:30** **Table Dinner**

July 24 (Monday)

9:30-10:15 Invited Plenary Talk Chair: Wen Li

9:30-10:15 Zheng-Sheng Wang
Enriched Subspace Regularization for Large
Discrete Ill-Posed Problems

10:15-10:25 Tea Break

10:25-11:10 Invited Plenary Talk Chair: Zheng-Da Huang

10:25-11:10 Pei-Chang Guo
On Regularization of Convolutional Kernel Tensors in
Neural Networks

11:10-12:00 Contributed Talks Chair: Sheng-Xin Zhu

11:10-11:35 Lu-Bin Cui
A Projection Method Based on Discrete Normalized
Dynamical System for Computing the C-Eigenpairs of
a Piezoelectric Tensor

11:35-12:00 Kang Zhao
Eigenvalue Embedding of Damped Vibroacoustic
System with No-Spillover

12:00-13:30 Lunch

14:30-16:10 Contributed Talks Chair: Xu Li

14:30-14:55 Tao Li
Structure Preserving Quaternion Biconjugate Gradient
Method

14:55-15:20 Qi-Lun Luo
Multi-Dimensional Data Processing with Bayesian
Inference via Structural Block Decomposition

15:20-15:45 Peng-Peng Xie
A Randomized Singular Value Decomposition for
Third-Order Oriented Tensors

15:45-16:10 Wei-Ru Xu

A Divide-and-Conquer Method for Constructing a Pseudo-Jacobi Matrix from Mixed Given Data

16:10-16:20 Tea Break

16:20-18:00 Contributed Talks Chair: Ai-Li Yang

16:20-16:40 Ying Gu

A Semi-Randomized Sketch-and-Project Method with Simple Random Sampling for Large-Scale Linear Systems

16:40-17:00 Yong-Yan Guo

A Restarted Large-Scale Spectral Clustering with Self-Guiding and Block Diagonal Representation

17:00-17:20 Shu-Ru He

Practical RPCG Methods for Complex Symmetric Linear Systems

17:20-17:40 Zong-Yuan Han

Logarithmic Determinant Calculation Based on Variance Reduction Technique

17:40-18:00 Bo Feng

A Block Lanczos Method for Large-Scale Quadratic Minimization Problems with Orthogonality Constraints

18:00-18:20 Closing Chair: Wei-Guo Wang

18:30-20:00 Dinner

July 25 (Tuesday)

9:30-12:00 Discussion

12:00-13:30 Lunch

14:30-18:00 Discussion

18:10-20:00 Dinner

July 26 (Wednesday)

Departure