

Session Program

May 18 - 22, 2026



27th Conference of the International Linear Algebra Society (ILAS 2026)

Advanced Acceleration and Convergence Techniques for Solving Linear and Nonlinear Systems

Virginia Tech
Blacksburg, VA 24061

Mon, May 18

3:45 PM

Advanced Acceleration and Convergence Techniques for Solving Linear and Nonlinear Systems: C

Session | Location: Virginia Tech, McBryde Hall 129

3:45 - 4:10 PM

Constant Memory and Synchronization Costs for Nonsymmetric Krylov Methods

Speaker

Stephen Thomas

4:10 - 4:35 PM

A Generalized Alternating Anderson Acceleration Method

Speaker

Yunhui He

4:35 - 5:00 PM

nIKrylov: A unified framework for nonlinear GCR-type Krylov subspace methods

Speaker

Tom Werner

5:00 - 5:25 PM

Accelerated local-global coupling for non-isothermal multiphase reactive flow in hydrate-bearing sediments

Speaker

Maria Vasilyeva

5:25 PM

Tue, May 19

11:00 AM

Advanced Acceleration and Convergence Techniques for Solving Linear and Nonlinear Systems: D

Session | Location: Virginia Tech, McBryde Hall 129

11:00 - 11:25 AM **A BFBt Preconditioner for Double Saddle-Point Systems**

Speaker

Chen Greif

11:25 - 11:50 AM

Robust Numerical Differentiation for Entropy-regularized Optimal Transport (EOT) with application to Shuffled Regression

Speaker

Xingjie Li

11:50 AM - 12:15 PM

GA-NGMRES: An Alternating NGMRES Method for Accelerating First-Order Optimization

Speaker

Andreas Mang

12:15 PM

3:45 PM

Advanced Acceleration and Convergence Techniques for Solving Linear and Nonlinear Systems: F

Session | Location: Virginia Tech, McBryde Hall 129

3:45 - 4:10 PM

Natural Gradient Descent for Hyperparameter Estimation in Bayesian Inverse Problems

Speaker

Elle Buser

4:10 - 4:35 PM

Flattening and Middle Rank Tensor Approximation

Speaker

Zequn Zheng

4:35 - 5:00 PM

Accelerated Multigrid Cycles

Speaker

Yunhui He

5:00 - 5:25 PM

Algebraic Multigrid for H-Curl-Systems

Speaker

Raymond Tuminaro

5:25 PM