

Session Program

May 18 - 22, 2026



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

Approximate Computing in Numerical Linear Algebra

Virginia Tech
Blacksburg, VA 24061

Mon, May 18

11:00 AM

Approximate Computing in Numerical Linear Algebra: A

Session | Location: Virginia Tech, Torgersen Hall 3100

11:00 - 11:25 AM

Restoring similarity in randomized Krylov methods with applications to eigenvalue problems and matrix functions

Speaker

Igor Simunec

11:25 - 11:50 AM

A general framework for Krylov ODE residuals with applications to randomized Krylov methods

Speaker

Emil Krieger

11:50 AM - 12:15 PM

A mixed precision algorithm for matrix root functions

Speaker

Mr Bowen Gao

12:15 PM

2:00 PM

Approximate Computing in Numerical Linear Algebra: B

Session | Location: Virginia Tech, Torgersen Hall 3100

2:00 - 2:25 PM

Adaptive Mixed Precision Hierarchical Matrices

Speaker

Dr Ritesh Khan

2:25 - 2:50 PM

Automated Precision Tuning for Numerical Algorithms

Speaker

Xinye Chen

2:50 - 3:15 PM

Iterative Refinement for a Subset of Eigenpairs of a Real Symmetric Matrix and Its Convergence Analysis

Speaker

Takeshi Terao

3:15 PM

Tue, May 19

11:00 AM

Approximate Computing in Numerical Linear Algebra: D

Session | Location: Virginia Tech, Torgersen Hall 3100

11:00 - 11:25 AM

Forward and backward error bounds for a mixed precision preconditioned conjugate gradient algorithm

Speaker

Yuxin Ma

11:25 - 11:50 AM

Mixed Precision General Alternating-Direction Implicit Method for Solving Large Sparse Linear Systems

Speaker

Juan Zhang

11:50 AM - 12:15 PM

Analysis of Floating-Point Matrix Multiplication Computed via Integer Arithmetic

Speaker

Mantas Mikaitis

12:15 PM