

Session Program

May 18 - 22, 2026



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

Hierarchical Low-Rank Approximations: Algorithms and Applications

Virginia Tech
Blacksburg, VA 24061

Wed, May 20

10:45 AM

Hierarchical Low-Rank Approximations: Algorithms and Applications: G

Session | Location: Virginia Tech, McBryde Hall 113

10:45 - 11:10 AM

Extension of hierarchical matrices to hierarchical tensors with butterfly compression

Speaker

Yang Liu

11:10 - 11:35 AM

Estimating High-Dimensional Covariance Matrices with Hierarchical Rank Structure

Speaker

Robin Armstrong

11:35 AM - 12:00 PM

Parametric Hierarchical Matrix Approximations to Kernel Matrices

Speaker

Abraham Khan

12:00 PM

Thu, May 21

11:00 AM

Hierarchical Low-Rank Approximations: Algorithms and Applications: H

Session | Location: Virginia Tech, McBryde Hall 113

11:00 - 11:25 AM

Superfast and stable divide-and-conquer singular value decomposition for hierarchical rank-structured matrices

Speaker

Chenyang Cao

11:25 - 11:50 AM

Unknown hierarchies, hyperbolic PDE, and randomized rank detection

Speaker

Christopher Wang

12:15 PM

Fri, May 22

8:45 AM

Hierarchical Low-Rank Approximations: Algorithms and Applications: J

Session | Location: Virginia Tech, McBryde Hall 113

8:45 - 9:10 AM

An adaptive method for constructing hierarchical approximations and its application to inverse problems

Speaker

Chao Chen

9:10 - 9:35 AM

Circulant Preconditioning fractional PDEs on Adaptive Meshes

Speaker

Kate Wall

9:35 - 10:00 AM

Adaptive coarse space for multi-level overlapping Schwarz preconditioners in FROSch

Speaker

Ichitaro Yamazaki

10:00 AM