**Session Program**

**May 18 – 22, 2026**


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

# Inverse Problems and Uncertainty Quantification through the Lens of Numerical Linear Algebra

Virginia Tech
Blacksburg, VA 24061

# Tue, May 19

3:45 PM

## Inverse Problems and Uncertainty Quantification through the Lens of Numerical Linear Algebra: F

**Session** | **Location:** Virginia Tech, Torgersen Hall 1030

3:45 – 4:10 PM

### Scalable iterative data-adaptive RKHS regularization for linear inverse problems

**Speaker**
Haibo Li

4:10 – 4:35 PM

### Stochastic zeroth-order calculation of operator quantities

**Speaker**
Jonas Bresch

4:35 – 5:00 PM

### Nonlinear OED with Column Subset Selection

**Speaker**
Amit Subrahmanya

5:00 – 5:25 PM

### A Scalable Sequential Framework for Dynamic Inverse Problems via Model Parameter Estimation

**Speaker**
Aryeh Keating

5:25 PM

# Wed, May 20

10:45 AM

## Inverse Problems and Uncertainty Quantification through the Lens of Numerical Linear Algebra: G

**Session** | **Location:** Virginia Tech, Torgersen Hall 1030

10:45 – 11:10 AM

### Randomized Generalized Error Minimizing Method for Linear Ill-Posed Problem

**Speaker**
Prof. Ning Zheng

11:10 – 11:35 AM

### Mixed-to-Low Precision Iterative Methods for Linear Inverse Problems

**Speaker**
Lucas Onisk

11:35 AM – 12:00 PM

### Separable Nonlinear Bayesian Inverse Problems

**Speaker**
Malena Espanol

12:00 PM

# Thu, May 21

11:00 AM

## Inverse Problems and Uncertainty Quantification through the Lens of Numerical Linear Algebra: H

**Session** | **Location:** Virginia Tech, Torgersen Hall 1030

11:00 – 11:25 AM **Projected Regularization in Low Precision**

**Speaker**
Chelsea Drum

11:25 – 11:50 AM **Bayesian inference for rough feature reconstructions**

**Speaker**
Prof. Lassi Roininen

11:50 AM – 12:15 PM **Data-driven discovery of chemical reaction networks**

**Speaker**
Abraham Reyes Velazquez

12:15 PM

2:00 PM

## Inverse Problems and Uncertainty Quantification through the Lens of Numerical Linear Algebra: I

**Session** | **Location:** Virginia Tech, Torgersen Hall 1030

2:00 – 2:25 PM **Discretization-free Bayesian inverse problems**

**Speaker**
Erkki Somersalo

2:25 – 2:50 PM

**Parametric Hyperbolic Conservation Laws: Learning Hyperbolic Conservation Laws from Data through Symmetrization.**

**Speaker**
Dr Lizuo Liu

2:50 – 3:15 PM

**Interpolation-Based Estimation and Uncertainty Quantification of Periodic Time-Varying Parameters**

**Speaker**
Dr Andrea Arnold

3:15 – 3:40 PM **Streaming Algorithms for Big Data Inverse Problems**

**Speaker**
Eric de Sturler

3:40 PM

# Fri, May 22

8:45 AM

## Inverse Problems and Uncertainty Quantification through the Lens of Numerical Linear Algebra: J

**Session** | **Location:** Virginia Tech, Torgersen Hall 1030

8:45 – 9:10 AM

### Multigrid-Accelerated Sparsity-Promoting Projection Methods for Inverse Problems

**Speaker**
Jonathan Lindbloom

9:10 – 9:35 AM

### Time-varying Bayesian Inverse Problems with Sparse Priors and Randomization

**Speaker**
Diego Arenas Mata

9:35 – 10:00 AM

### A Provably Convergent MM-GKS Variant for Large-Scale Image Reconstruction Problems

**Speaker**
Misha Kilmer

10:00 AM