

# Thursday 3/26

**07:30- 08:30 Breakfast [Copper Conference Center]**

<b>08:00-10:05</b>	<b>Session 14A: Asynchronous and Randomized Algorithms.</b> Bighorn B	<b>08:00-10:05</b>	<b>Session 14B: Software Aspects.</b> Bighorn C/1	<b>08:00-10:05</b>	<b>Session 14C: Discretizations.</b> Bighorn C/2
08:00	Smoothing by asynchronous iterations and sparse approximate inverses for fluid dynamics on graphics processing units <b>Aditya Kashi</b> Siva Nadarajah	08:00	Improving Hypre's semi-structured support <b>Victor Paludetto Magri</b> Ulrike Meier Yang, Robert Falgout	08:00	Adaptive Space-Time CFOSLS for Evolution Equations <b>Andreas Schafelner</b> Panayot S. Vassilevski
08:25	Redundancy as a Remedy for Delayed Communication in Asynchronous Solvers <b>Aaron Barrett</b> Alyson Fox	08:25	xSDK: Toward a Community Software Development Kit (SDK) for High-Performance Computational Science <b>Sarah Osborn</b> Ulrike Yang	08:25	An Adaptive Newton Div-Curl Least-Squares Finite Element Method for the Cahn-Hilliard Equation <b>Chad Westphal</b>
08:50	Dynamic Non-Uniform Randomization in Asynchronous Linear Solvers <b>Masha Sosonkina</b> Evan Coleman, Erik Jensen	08:50	Finite Element Tools for Performance Portability of Implicit and IMEX Simulations on Next Generation Architectures <b>Roger P. Pawlowski</b> Matthew T. Bettencourt, Eric C. Cyr, Sean T. Miller, Edward G. Phillips, Eric T. Phipps, Nathan V. Roberts, John N. Shadid, Christian R. Trott	08:50	New mixed methods for incompressible hyperelasticity in terms of Kirchhoff stress <b>Ricardo Ruiz-Baier</b>
09:15	—	09:15	—	09:15	Condensed Nonconforming Reformulations for Preconditioning Finite Element Discretization Problems <b>Delyan Kalchev</b> Panayt Vassilevski

**10:05- Coffee \& Tea Service**  
**10:25**

**10:25- Session 15A: Iterative Methods in Applica-**  
**12:30 tions.**  
 Bighorn B

**10:25- Session 15B: Preconditioning.**  
**12:30 Bighorn C/1**

**10:25- Session 15C: Inverse Problems.**  
**12:30 Bighorn C/2**

10:25 A System of Semilinear Singularly Per-  
 turbed Convection-Diffusion type  
**Varsha Srivastava**

10:50 Unconstrained Energy Functional Meth-  
 ods for Massively Parallel Iterative Eigen-  
 solvers  
**Andrew Canning** Mauro Del Ben, Osni  
 Marques

11:15 Generation of compressed stationary  
 fields with circulant embedding  
**Robert Sawko** Malgorzata Zimon

10:25 Block Preconditioning for Implicit  
 Runge-Kutta Methods for Time-  
 Dependent  
**Victoria Howle** Katharine Long, William  
 Milestone, Md Masud Rana, Ashley Meek

10:50 Block preconditioners for the the cou-  
 pled Darcy-Stokes problem  
**Michele Benzi**

11:15 —

10:25 Hyper-Differential Sensitivity Analysis  
 for Inverse Problems.  
**Bart van Bloemen Waanders** Isaac Sun-  
 seri, Joseph Hart, Alen Alexanderian

10:50 INCISIVE DVF INVERSION VIA BI-  
 RESIDUAL FEEDBACK  
**Abhishek Dubey** Alexandros-Stavros  
 Iliopoulos, Xiaobai Sun

11:15 —