

SPARSE DAYS 2020 ONLINE

Monday, November 23

14:00	WELCOME MESSAGE	
14:05	SESSION 1	[U. Rde]
14:05	Martin Khn	Implicitly extrapolated geometric multigrid for the gyrokinetic Poisson equation from fusion plasma applications
14:25	Pierre Matalon	Toward fast and accurate solutions of elliptic equations with HHO discretizations and multigrid methods
14:45	Roel Tielen	Block ILUT smoothers for p-multigrid methods in Isogeometric Analysis
15:05	Julien Brenneck	Iteration for Contour-Based Nonlinear Eigensolvers
15:25	VIRTUAL COFFEE BREAK	
16:10	SESSION 2	[A. Wathen]
16:10	Chao Chen	RCHOL: Randomized Cholesky Factorization for SDD Matrices
16:30	Ron Morgan	Stable Polynomial Preconditioning for Linear Equations and Eigenvalues
16:50	FLASH TALKS I	[B. Lucas]
16:50	Andrei Dumitrasc	Deflation for the off-diagonal block in saddle-point systems
16:55	Francesco Mezzadri	Iterative solution of horizontal linear complementarity problems on parallel computers
17:00	Ani Mirai	Contractive local adaptive smoothing based on Drfler's marking in a-posteriori-steered p-robust multigrid solvers
17:05	Bedros Afeyan	Exploiting sparsity and machine learning in kinetic simulations of plasmas
17:10	VIRTUAL COFFEE BREAK	
17:40	SESSION 3	[T. Davis]
17:40	Bastien Vieubl	Multiple precisions iterative refinement for the solution of large sparse linear systems
18:00	Azzam Haidar	How NVIDIA Tensor Cores can Help HPC Scientific Application Unleash the Power of GPUs using Mixed Precision Solvers
18:20	Jennifer Loe	Multiprecision GMRES in Belos and Kokkos
18:40	Robert Lucas	Conveyors, an Abstraction for Message Aggregation

Tuesday, November 24

14:00	SESSION 4	[J. Scott]
14:00	Ieva Dauzickaite	Spectral estimates for saddle point matrices arising in weak constraint four-dimensional variational data assimilation
14:20	Jemima Tabcart	Preconditioners for saddle point weak-constraint 4D-Var with correlated observation errors
14:40	Grgoire Pichon	Trading Performance for Memory in Sparse Direct Solvers using Low-rank Compression
15:00	John Conroy	Two Truths in Spectral Clustering as Seen in Three Theorems and Three Applications
15:20	VIRTUAL COFFEE BREAK	
15:50	SESSION 5	[M. Kocvara]
15:50	Jeffrey Cornelis	Projected Newton method for the regularization of ill-posed linear inverse problems
16:10	Roman Iakymchuk	Conjugate Gradient Solvers with Accuracy and Reproducibility Guarantees in Hybrid Parallel Environments
16:30	Wim Vanroose	Krylov-Simplex method to solve inverse problems in l1-norm and max-norm.
16:50	FLASH TALKS II	[S. Li]
16:50	Anastasiia Minenkova	Stability of Certain Canonical Forms under Small Perturbation
16:55	Jason Riedy	Graph Analysis and Novel Architectures
17:00	Tim Davis	SuiteSparse:GraphBLAS: graph algorithms in the language of linear algebra
17:05	Esmond Ng	Does the TSP heuristic for minimizing block counts in sparse Cholesky factorization have to be expensive?
17:10	VIRTUAL COFFEE BREAK	
17:40	SESSION 6	[I. Duff]
17:40	Sherry Li	Leveraging One-Sided Communication for Sparse Triangular Solvers
18:00	Mohsen Mahmoudi Aznaveh	Parallel multifrontal sparse LU factorization based on UMFPACK
18:20	Jinhao Chen	Sparse roundoff-error-free LU update
18:40	Erick Moreno-Centeno	Exactly Solving Linear Systems via the Sparse Exact (SPEX) Factorization Framework

The schedule is based on the Central European Time (CET) time zone (GMT+1)