

Preliminary Scientific Program

	MONDAY 17	TUESDAY 18	WEDNESDAY 19	THURSDAY 20
9:00am	Registration	Chair: B. Philippe P. Talk: Y. Saad	Chair: Y. Saad P.Talk: D. Silvester	Chair: D. Szyld P. Talk: B. Philippe
10:00am	Registration, Coffee	Coffee Break	Coffee Break	Coffee Break
10h45am	Opening Chair: Y. Saad	10h:00am-13:00am Session 2	10h:00am-13:00am Minisymposium2A	10h:00am-13:00am Session 8
11:00am-12:00am	P. Talk: P. Van Dooren	Session 3	Session 6	Session 9
12:00am-13:00am	P. Talk: B. Maury			
13:00am	Lunch	Lunch	Lunch	Lunch
15:00pm-16:00pm	Chair: P. Van Dooren P. Talk: F. Nataf	Chair: B. Maury P. Talk: Y. Notay	Chair: F. Nataf P. Talk: H. Yserentant	Chair: R. Beauwens P. Talk: D. Szyld
16h:00pm-16:30pm	Coffee Break	Coffee Break	Coffee Break	Coffee Break
16:30pm-19:00pm	Minisymposium1 Session1	Session 4 Session 5	Minisymposium2B Session 7	Session 10

Minisymposium 1: MONDAY 17, 16:30pm-19:00pm

Organizers: S. Fujino and M.B. van Gijzen

Chair	P. van Dooren
16:30pm-17:00pm	P. Sonneveld <i>The IDR-theorem</i>
17:00pm-17:30pm	M. van Gijzen <i>IDR-based algorithms</i>
17:30pm-18:00pm	G. Sleijpen <i>On Bi-CGSTAB and IDR(s)</i>
18:00pm-18:30pm	S. Fujino <i>Performance evaluation of IDR(s)</i>
18:30pm-19:00pm	Y. Onoue <i>Adaptively tuned IDR(s) method on parameters</i>

SESSION 1: MONDAY 17, 16:30pm-19:00pm

Chair	H. Yserentant
16:30pm-17:00pm	D.R. van der Heul <i>Application of the shifted-Laplace preconditioner for iterative solution of a higher order finite element discretisation of the vector wave equation</i>
17:00pm-17:30pm	M. Petcu <i>Un algorithme parallèle modifié pour les ODEs d'ordre deux</i>
17:30pm-18:00pm	S. Delcourte <i>Preconditioning Navier-Stokes problem discretized by a finite volume method</i>
18:00pm-18:30pm	C. Audouse <i>Physics-based metamodeling for parametrized PDE problems using space-parameter space Principal Component Analysis</i>
18:30pm-19:00pm	F. M. Allan <i>Multidimensional Shooting Method for Nonlinear Boundary Value Problems</i>

SESSION 2: TUESDAY 18, 10:30am-13:00am

Chair	B. Philippe
10:30am-11:00am	M. Rozloznik <i>Numerical behavior of inexact saddle point solvers</i>
11:00am-11:30am	P. Jiranek <i>How to make simpler GMRES and GCR more stable</i>
11:30am-12:00am	K. Meerbergen <i>The parametrized Lanczos method for multiple right-hand sides</i>
12:00am-12:30am	F. Marcuzzi <i>Feedback control algorithms for large linear systems</i>
12:30am-13:00am	X. Cui <i>Generalized approximate inverse preconditioners for least-squares problems</i>

SESSION 3: TUESDAY 18, 10:30am-13:00am

Chair	D. J. Silvester
10:30am-11:00am	A. Napov <i>Algebraic analysis of V-cycle multigrid</i>
11:00am-11:30am	S. Minjeaud <i>A multigrid method for evolution problems with adaptive local refinement</i>
11:30am-12:00am	M. Bolten <i>Algebraic analysis of non-Galerkin type coarse grid operators in multigrid methods and examples for circulant matrices</i>
12:00am-12:30am	M. Bader <i>Memory and cache efficient grid generation based on Sierpinski curves for the simulation of dynamica</i>
12:30am-13:00am	C. Tablino Possio <i>Algebraic multigrid methods for (multilevel)structured-plus-band uniformly bounded Hermitian positive definite linear systems</i>

SESSION 4: TUESDAY 18, 16:30pm-19:00pm

Chair	B. Maury
16:30pm-17:00pm	J. Laminie <i>On a local multilevel scheme for the 2D incompressible Navier-Stokes equations with domain decomposition</i>
17:00pm-17:30pm	P. Poulet <i>Multilevel preconditioning for solving the Helmholtz equation</i>
17:30pm-18:00pm	B. Lathuilière <i>A domain decomposition method for the resolution of an eigenvalue problem in neutron physics</i>
18:00pm-18:30pm	K. Johannsen <i>Multilevel Methods for Nonsymmetric Discontinuous Galerkin Methods</i>
18:30pm-19:00pm	M.A. Hajji <i>An Iterative Scheme for Multilayer Flows in Porous Media</i>

SESSION 5: TUESDAY 18, 16:30pm-19:00pm

Chair	D. Szyld
16:30pm-17:00pm	Y. Chahlaoui <i>Calculating the H_∞-norm of large sparse systems via Chandrasekhar iterations and extrapolation</i>
17:00pm-17:30pm	A. Salam <i>A new SR-algorithm for solving real algebraic Riccati equation</i>
17:30pm-18:00pm	L. Amodei <i>An invariant subspace method for large algebraic Riccati equations</i>
18:00pm-18:30pm	A. Bentbib <i>Jacobi method for Hamiltonian eigenvalue problems</i>
18:30pm-19:00pm	M. Heyouni <i>Global and Block extended Arnoldi methods for Sylvester matrix equations</i>

Minisymposium2A: WEDNESDAY 10:30pm-13:00pm

Organizers: J. Erhel and L. Giraud

Chair	Y. Saad
10:30am-11:00am	D. Szyld <i>On the convergence of Algebraic Optimizable Schwarz Methods with applications to elliptic problems</i>
11:00am-11:30am	D. Tromeur-Dervout <i>Aitken acceleration of the convergence of the Schwarz method with Neumann- Dirichlet conditions on artificial boundaries to solve problem of Darcy flow with strong contrast on the permeabilities</i>
11:30am-12:00am	F. Nataf <i>Preconditoners for problems with extreme contrast in the coefficients</i>
12:00am-12:30am	R. Scheichl <i>Analysis of FETI methods for multiscale PDEs</i>
12:30am-13:00am	M. Genseberger <i>Improving the parallel performance of a domain decomposition preconditioning technique in the Jacobi-Davidson method for large scale eigenvalue problems</i>

SESSION 6: WEDNESDAY 19, 10:30am-13:00am

Chair	G. Sleijpen
10:30am-11:00am	A. Ponçot <i>Non-linear minimization method comparison for data assimilation for nuclear reactors</i>
11:00am-11:30am	E. Catinas <i>On the Newton-GMBACK method</i>
11:30am-12:00am	R. Haelterman <i>A new quasi-Newton secant method for arbitrary black-box linear problems</i>
12:00am-12:30am	T. Catinas <i>On some properties of the bivariate Shepard operator of Bernoulli type</i>
12:30am-13:00am	M. Rojas <i>LSTRS: MATLAB Software for Large-Scale Trust-Region Subproblems and Regularization</i>

Minisymposium2B: WEDNESDAY 19, 16:30pm-18:00pm

Organizers: J. Erhel and L. Giraud

Chair	F. Nataf
16:30pm-17:00pm	C. Vuik <i>Deflation acceleration of block ILU preconditioned Krylov methods</i>
17:00pm-17:30pm	J. Gaidamour <i>Parallel resolution of sparse linear systems by mixing direct and iterative methods</i>
17:30pm-18:00pm	G.A. Atenekeng-Kahou; <i>A fully automatic parallel GMRES solver preconditionned by a multiplicative Schwarz iteration</i>
18:00pm-18:30pm	L. Giraud <i>Parallel algebraic additive Schwarz preconditioners for Schur complement systems in 3D</i>
20:00pm	CONFERENCE DINNER

SESSION 7: WEDNESDAY 19, 16:30pm-18:30pm

Chair	P. Sonneveld
16:30pm-17:00pm	A. Bouhamidi <i>A thin plate spline-Lypapunov method for smoothing approximation problems</i>
17:00pm-17:30pm	G. Boutry <i>About the distance to the nearest pencil</i>
17:30pm-18:00pm	C. Ashcraft <i>A Hybrid Direct-Iterative Method for Constrained Linear Systems from Implicit Structural Mechanics</i>
18:00pm-18:30pm	S. Belhaj <i>Block factorization of a Hankel matrix and Euclidean Algorithm</i>
20:00pm	CONFERENCE DINNER

SESSION 8: THURSDAY 20, 10:30am-13:00am

Chair	M. Rozloznik
10:30am-11:00am	D. Fritzsche <i>On Algorithms to Find an Overlapping Partitioning of a Graph and Applications to Preconditioning</i>
11:00am-11:30am	C. Vuik <i>On iterative solvers combined with projected Newton methods for reacting flow problems</i>
11:30am-12:00am	N. Gillis <i>Nonnegative Matrix Factorization and Underapproximation</i>
12:00am-12:30am	A. Gryson <i>Extremal rational functions on discrete sets and superlinear convergence of the ADI method</i>
12:30am-13:00am	M. Addam <i>Imaging reconstruction of internal tissue region boundary by analytic and numerical simulation</i>

SESSION 9: THURSDAY 20, 10:30am-13:00am

Chair	Y. Notay
10:30am-11:00am	P. Spiteri <i>Iterative methods for anisotropic diffusion of speckled medical images</i>
11:00am-11:30am	J. Mas <i>Balanced incomplete factorisation based on AISM</i>
11:30am-12:00am	J. M. Tang <i>A generalized projected CG method with applications to Bubbly flow problems</i>
12:00am-12:30am	M. Wang <i>On the inexactness level of Robust Levenberg-Marquardt methods</i>
12:30am-13:00am	A. Al Jabouri <i>Generic Simulation Service for Distributed Multi-Agent Systems</i>