

# International Conference on Numerical Linear Algebra & Its Applications

## Schedule

<b>Day 1</b>	<b>January 15, 2013</b>
<b>9:15 – 9:25 AM</b>	<b>Opening remarks</b>
	<b>Chair: Biswa Nath Datta</b>
<b>9:25 – 10:15</b>	<b>Volker Mehrmann:</b> Self-adjoint Differential Operators and Optimal Control
<b>10:15 – 10:30</b>	<b>Rachel Kalpana Kalaimani :</b> Distance of a Pencil from having a Zero at Infinity
<b>10:30 – 11:00</b>	<b>Tea/Coffee</b>
	<b>Chair: Volker Mehrmann</b>
<b>11:00 – 11:50</b>	<b>Biswa Nath Datta:</b> Finite Element Model Updating: A Structured Inverse Eigenvalue Problem for Quadratic Matrix Pencil
<b>11:50 – 12:20</b>	<b>Vu Hoang Linh:</b> Robust Stability of Linear Delay Differential-Algebraic Systems
<b>12:20 - 12:35</b>	<b>Karuna Kalita:</b> Extracting Eigenvalues and Eigenvectors of a QEVP in the form of Homogenous Co-ordinates using Newton-Raphson Technique
<b>12:40 – 14:00</b>	<b>Lunch</b>
	<b>Chair: Froilan M. Dopico</b>
<b>14:00 – 14:50</b>	<b>David S. Watkins:</b> What's So Great About Krylov Subspaces?
<b>14:50 – 15:20</b>	<b>G. Sajith:</b> An I/O Efficient Algorithm for Hessenberg Reduction
<b>15:20 – 15:35</b>	<b>Kapil Ahuja:</b> Recycling BiCGSTAB
<b>15:35 – 16: 00</b>	<b>Tea/Coffee</b>
	<b>Chair: David S. Watkins</b>
<b>16:00 – 16:50</b>	<b>Froilan M. Dopico:</b> Structured Eigenvalue Condition Numbers for Parameterized Quasiseparable Matrices
<b>16:50 – 17:20</b>	<b>Bibhas Adhikari:</b> Entanglement of Multipartite Systems: A few Open Problems
<b>17:20 – 17:35</b>	<b>Namita Behera:</b> Sensitivity Analysis of Rational Eigenvalue Problem
<b>19:30 -20:30</b>	<b>Dinner</b>

<b>Day 2</b>	<b>January 16, 2013</b>
	<b>Chair: D. Steven Mackey</b>
<b>9:00 – 9:50</b>	<b>Balmohan V. Limaye:</b> Conditioning of a Basis
<b>9:50 – 10:20</b>	<b>Michael Karow:</b> The Separation of two Matrices and its Application in the Perturbation Theory of Eigenvalues and Invariant Subspaces
<b>10:20 -10:35</b>	<b>Debasisha Mishra:</b> B <sub>+</sub> -Splittings of Matrices
<b>10:35 – 11:00</b>	<b>Tea/Coffee</b>
	<b>Chair: Balmohan V. Limaye</b>
<b>11:00 – 11:50</b>	<b>D. Steven Mackey:</b> Minimal Indices of Singular Matrix Polynomials: Some Recent Perspectives
<b>11:50 – 12:20</b>	<b>Madhu N. Belur:</b> Application of structured Linearization for Efficient Computation of the H-infinity Norm of a Transfer Matrix
<b>12:20 – 12:35</b>	<b>Vasilije Perović:</b> Linearizations of Matrix Polynomials in Bernstein Basis
<b>12:35 – 14:00</b>	<b>Lunch</b>
	<b>Chair: Heike Faßbender</b>
<b>14:00 – 14:50</b>	<b>Michael L. Overton:</b> Characterization and Construction of the Nearest Defective Matrix via Coalescence of Pseudospectral Components
<b>14:50 – 15:20</b>	<b>Emre Mengi:</b> Matrix Functions with Specified Eigenvalues
<b>15:20 – 15:35</b>	<b>Ravi Srivastava:</b> Distance problems for Hermitian Pencils – an epsilon Pseudospectra based Approach
<b>15:35 – 16: 00</b>	<b>Tea/Coffee</b>
	<b>Chair: Michael L. Overton</b>
<b>16:00 – 16:50</b>	<b>Heike Faßbender:</b> Structured Eigenvalue Problems – Structure-Preserving Algorithms, Structured Error Analysis
<b>16:50 – 17:05</b>	<b>Bibek Kabi:</b> Comparative Study of Tridiagonalization Methods for Fast SVD
<b>17:05-17:20</b>	<b>Shwetabh Srivastava:</b> A family of Iterative Methods for Computing the Moore–Penrose Generalized Inverse
<b>17:20 – 17:35</b>	<b>C. S. Sastry:</b> Sparse Description of Linear Systems and Application in Computed Tomography
<b>19:30 -20:30</b>	<b>Dinner</b>

<b>Day 3</b>	<b>January 17, 2013</b>
	<b>Chair: Christian Mehl</b>
<b>9:00 – 9:50</b>	<b>Valeria Simoncini:</b> On the Numerical Solution of Large-scale Linear Matrix Equations
<b>9:50 – 10:20</b>	<b>Soumyendu Raha:</b> A Regularization Based Method for Dynamic Optimization with High Index DAEs.
<b>10:20 -10:35</b>	<b>Ayaz Ahmad:</b> Numerical Gradient Algorithms for Eigenvalue Calculations
<b>10:35 – 11:00</b>	<b>Tea/Coffee</b>
	<b>Chair: Valeria Simoncini</b>
<b>11:00 – 11:50</b>	<b>Christian Mehl:</b> Structured Backward Errors for Eigenvalues of Hermitian Pencils
<b>11:50 – 12:20</b>	<b>Sk Safique Ahmad:</b> Backward Errors for Eigenvalues and Eigenvectors of Structured Eigenvalue Problems
<b>12:20 – 12:35</b>	<b>Punit Sharma:</b> Structured Backward Error of Approximate Eigenvalues of T-Palindromic Polynomials
<b>12:35 – 14:00</b>	Lunch
	<b>Local sightseeing</b>
<b>19:30 -20:30</b>	<b>Conference Dinner</b>

<b>Day 4</b>	<b>January 18, 2013</b>
	<b>Chair: Peter Benner</b>
<b>9:00 – 9:50</b>	<b>Stephen Kirkland:</b> Computation Considerations for the Group Inverse for an Irreducible M-Matrix
<b>9:50 – 10:20</b>	<b>K.C. Sivakumar:</b> Nonnegative Generalized Inverses and Certain Subclasses of Singular Q-matrices
<b>10:20 -10:35</b>	<b>Manideepa Saha:</b> A Constructive Method for obtaining a Preferred Basis from a Quasi-Preferred Basis for M-matrices
<b>10:35 – 11:00</b>	<b>Tea/Coffee</b>
	<b>Chair: Stephen Kirkland</b>
<b>11:00 – 11:50</b>	<b>Ivan Slapnicar:</b> Accurate Eigenvalue Decomposition of Arrowhead Matrices and Applications
<b>11:50 – 12:05</b>	<b>Sukhjit Singh:</b> Eigenvalues of Symmetric Interval Matrices using a Single step Eigen Perturbation Method
<b>12:05 – 14:00</b>	<b>Lunch</b>
	<b>Chair: Ivan Slapnicar</b>
<b>14:00 – 14:50</b>	<b>Peter Benner:</b> Linear and Nonlinear Matrix Equations Arising in Model Reduction
<b>14:50 – 15:20</b>	<b>H. Pillai:</b> A Linear algebraic look at Differential Ricatti equation and Algebraic Ricatti (in)equality
<b>15:20 - 15:30</b>	<b>Closing</b>
<b>15:30 – 16: 00</b>	<b>Tea/Coffee</b>
<b>19:30 -20:30</b>	<b>Dinner</b>