

Gene Golub Memorial Conference Program

Friday, February 29, 2008

Conference Registration 8:30 UMass Dartmouth ATMC, Fall River, Mass

Morning Session (Chair: Sigal Gottlieb)

- 9:00 - 9:10** *Welcome Address*
 Anthony Garro, Provost, UMass Dartmouth
- 9:10 - 9:25** *Opening remarks and brief overview of the career of Gene Golub*
 Steven Leon, UMass Dartmouth
- 9:25 - 9:55** *Implementing the Retraction Algorithm for factoring symmetric banded matrices*
 Linda Kaufman, William Paterson University
- 9:55 - 10:25** *Optimization of the Spectral Radius of Sums and Products of Nonnegative Matrices*
 Michael Neumann, University of Connecticut

10:25 -11:00 **Coffee break and group picture**

Morning Session 2 (Chair: Alan Edelman)

- 11:00 - 11:40** *Inexact Krylov Subspace Methods for PDEs and Control Problems*
 Daniel Szyld, Temple University
- 11:40 - 12:20** *Orthogonal Polynomials, Moments, Measure Deformation, Dynamical Systems, and SVD Algorithm*
 Moody Chu, North Carolina State University

Lunch 12:20 -1:30 (At ATMC)

Afternoon session (Chair: Homer Walker)

- 1:30 - 2:00** *Multilevel Methods for Image Deblurring Problems*
Misha Kilmer, Tufts University (talk cancelled)
- 2:00 - 2:30** *The Numerical Mathematics Consortium -- and what Gene had to say about it*
Alan Edelman, MIT
- 2:30 - 3:00** *Least Squares with Nonnegativity Constraints and Generalizations*
Bob Plemmons, Wake Forest University

Coffee break 3:00 - 3:30

Afternoon session 2 (Chair: Jae-Hun Jung)

- 3:30 - 4:00** *An analysis of $ML(n)BiCGSTAB$*
Man-Chung Yeung, University of Wyoming
- 4:00 - 4:30** *Multiphysics Simulations*
Svante Littmarck, Comsol
- 4:30 - 5:00** *Lipschitz stability of canonical Jordan bases of H -selfadjoint matrices*
Vadim Olshevsky, University of Connecticut

Reception 5:00 - 6:30 at ATMC

Banquet at White's of Westport 7:00

Banquet Program - Remembrances of Gene

Saturday, March 1

Morning Session (Chair: Vadim Olshevsky)

- 9:00 - 9:30 *Quasiseparable matrices and polynomials*
Tom Bella, University of Connecticut
- 9:30 - 10:00 *Traub algorithm based on quasiseparable matrices*
Pavel Zhlobich, University of Connecticut

Coffee break 10:00 - 10:30

Morning session 2 (Chair: Steven Leon)

- 10:30 - 11:00 *Adjoint sensitivity analysis for two-layered shallow water model in a limited domain*
Vani Cheruvu, Florida State University
- 11:00 - 11:30 *DIIS Acceleration of Fixed-Point Iteration*
Homer Walker, WPI and US Dept of Energy
- 11:30 - 12:00 *Block Krylov Subspace Methods for Solving Large Sparse SVD and Eigenvalue Problems*
James Baglama, University of Rhode Island
- 12:00 - 12:15 *Closing Remarks - Carrying on the legacy of Gene Golub*

Box Lunches will be provided