THE UNIVERSITY   **OF HONG KONG**

Department of Mathematics

Numerical Mathematics and Applied Analysis Group (NMAA)

Summer Workshop on Scientific Computing
10 July 2004 (Saturday)
Room 517 Meng Wah Complex, HKU

Morning Session	
9:13 – 9:15	*Introduction by Michael Ng*
9:15 – 9:45	Raymond H. Chan *Department of Mathematics, The Chinese University of Hong Kong* *Principal Component Analysis for Large Distributed and Continuously Updating Data Sets*
9:45-10:00	Michael Wong Department of Mathematics, The Chinese University of Hong Kong *Pricing American-Style Options by Memory Reduction Monte Carlo Methods*
10:00-10:15	Eric S. Fung Department of Mathematics, The University of Hong Kong *Higher-Order Hidden Markov Models*
10:15-10:30	Edmond Wu Department of Mathematics, The University of Hong Kong *Computational Intelligence for Website Optimization*
10:30-10:45	Chung-Wa Ho Department of Mathematics, The Chinese University of Hong Kong *Impulse Noise Removal by Median-type Noise Detectors and Edge-preserving Regularization*
	Coffee and Tea
11:00-11:30	Man-Chung Yeung Department of Mathematics, University of Wyoming *Transpose-free Multiple Lanczos and Its Application in Pade Approximation*
11:30-12:00	Haiwei Sun Chemical Engineering Department, University of Alabama *High Order Accuracy of the 4-Point HNG Scheme*
12:00-12:15	Wai-Ki Ching Department of Mathematics, The University of Hong Kong *A Hybrid Algorithm for Queueing Systems*
12:15-12:30	Alfred K. Ma Department of Mathematics, The Chinese University of Hong Kong *Boundary Value Methods for Solving Transient Solutions of Markovian Queueing Networks*
	Lunch

Summer Workshop on Scientific Computing

10 July 2004 (Saturday)

Room 517 Meng Wah Complex, HKU

Afternoon Session	
14:00-14:30	Wai-Shun Cheung Department of Mathematics, The University of Hong Kong *A Matrix Approach to the Geometry of Polynomials*
14:30-15:00	Chi-Wah Leung Po Leung Kuk Community College of Hong Kong *Hypercomplex Algebras generated by Square Roots of Plus Minus 1*
15:00-15:30	Shufang Xu School of Mathematical Sciences, Peking University *A Variational Approach for Robust Partial Eigenvalue Assignment Problem in Second Order Control Systems*
15:30-16:00	Siu-Pang Yung Department of Mathematics, The University of Hong Kong *Some Recent Attempts on Deblurring Images Using Wavelets*
Coffee and Tea	
16:15-16:45	Xiao-Qing Jin Faculy of Science and Technology, Macau University *Some Stability Properties of T. Chan's Preconditioner*
16:45-17:00	Michael K. Ng Department of Mathematics, The University of Hong Kong *Some Research Problems for Toeplitz Matrices*
17:00-17:15	Youwei Wen Department of Mathematics, The University of Hong Kong *Preconditioners Based On Gohberg-Semumcul Formula for Positive Definite Toeplitz Systems*
17:15-17:45	Yi-Min Wei Department of Mathematics, Fudan University *Recent Results on the Drazin Inverse and Singular Linear Equations*
17:45-18:00	Zheng-Jian Bai Department of Mathematics, National University of Singapore *Inverse Eigenvalue Problems*