

## **Mathematics and Statistics Programme**

**Wednesday, 15th October 2008**

**Venue: Block S16-06-118**

### **Session 1**

**Chairperson: BAO Weizhu, National University of Singapore**

10.40am - 11.20am TOH Kim Chuan  
Department of Mathematics, National University of Singapore  
Title: *A Newton-CG Augmented Lagrangian Method for Semidefinite Programming*

11.20am - 12.00pm GUO Xuejun  
Department of Mathematics, Nanjing University  
Title: *A note on norm of units of number fields*

12.00pm - 14.00pm Lunch

### **Session 2**

**Chairperson: YU Shih-Hsien, National University of Singapore**

14.00pm - 14.40pm WU Haijun  
Department of Mathematics, Nanjing University  
Title: *Discontinuous Galerkin Methods for the Helmholtz Equation with Large Wave Number*

14.40pm - 15.20pm HWANG Feng-Nan  
Department of Mathematics, National Central University  
Title: *Some Newton Methods with Nonlinear Block Gaussian Eliminations for the Transonic Compressible Nozzle Flow Problem*

15.20pm - 16.00pm Coffee & Tea Break

### **Session 3**

**Chairperson: WU Haijun, Nanjing University**

16.00pm - 16.40pm BAO Weizhu  
Department of Mathematics, National University of Singapore  
Title: *Analysis and Efficient Computation for the Schrodinger Equations in the Semiclassical Regimes*

16.40pm - 17.20pm DAI Xiongping  
Department of Mathematics, Nanjing University  
Title: *Nicely Closing Property and Approximation of Lyapunov Exponents of Linear Cocycles*

## Thursday, 16th October 2008

Venue: Block S14-03-01 (Math Studio)

### Session 4

Chairperson: CHEN Hung, National Taiwan University

9.00am - 9.40am      BAI Zhidong  
Department of Statistics & Applied Probability, National University of  
Singapore  
Title: TBA

9.40am - 10.20am    ZHOU Wang  
Department of Statistics & Applied Probability, National University of  
Singapore  
Title: *Towards A Universal Self-normalized Moderate deviation*

10.20am - 11.00am    Coffee & Tea Break

### Session 5

Chairperson: BAO Weizhu, National University of Singapore

11.00am - 11.40am    CHEN Hung  
Department of Mathematics, National Taiwan University  
Title: *Random Thresholds for Predictor Selection Via Lasso and  
Prediction Based Criterion*

12.00pm - 14.00pm    Lunch

### Session 6

Chairperson: LIAO Liangwen, Nanjing University

14.00pm - 14.40pm    YU Shih-Hsien  
Department of Mathematics, National University of Singapore  
Title: Maxwell Boundary Condition for Boltzmann Equation

14.40pm - 15.20pm    HSIA Chun-Hsiung  
Department of Mathematics, National Taiwan University  
Title: *Stratified rotating Boussinesq equations in geophysical fluid  
dynamics: Dynamic bifurcation and periodic solutions*

15.20pm - 15.50pm    Coffee & Tea Break

**Session 7**

**Chairperson: Chen Zehua, National University of Singapore**

- 15.50pm - 16.30pm    LIAO Liangwen  
Department of Mathematics, Nanjing University  
Title: *Nevanlinna theory and nonlinear differential equations*
- 16.30pm - 17.10pm    YU Jeng-Daw  
Department of Mathematics, National Taiwan University  
Title: *Observations on differential equations of Calabi-Yau type*
- 17.10pm - 17.50pm    XU Gang  
Department of Mathematics, Nanjing University  
Title: *The Global Transonic Shock Problem for the Supersonic Flow Past a Sharp Cone*

**Friday, 17th October 2008**

**Venue: Block S14-03-01 (Math Studio)**

9.00am - 12.00pm      Visit Departments and Discussion