Young Mathematician Forum

June 18, 2013 - June 21, 2013

Schedule

School of Mathematical Sciences

Beijing International Center for Mathematical Research

Peking University, Beijing, China

Schedule

June 18 - June 21, 2013

Opening Ceremony

June 18, 2013 Tuesday
Place: Conference Room,Second Floor,Jia Yi Bing Building,No 82 Jing chun yuan,PKU

08:30-09:10	**Opening Ceremony(Photo)**
09:10-10:30	**Tea Time**

Pure math

June 18, 2013 Tuesday
Place: Conference Room,Second Floor,Jia Yi Bing Building,No 82 Jing chun yuan,PKU

Morning	
Session One	**Chair: Xiaobo Liu(Peking University)**
10:30-11:15	**Yi Ni (Caltech)** *Heegaard Floer correction terms and rational genus bounds*
11:25-12:10	**Fei Han (National University of Singapore)** *Equivariant Cohomology and Bismut-Chern Character in the Stolz-Teichner Program*
Lunch	**Chang chunyuan**
Afternoon	
Session One	**Chair: Shuai Guo (Peking University)**
14:00—14:45	**Hsian-Hua Tseng (Ohio State University)** *Counting disks in toric varieties*
14:55—15:40	**Wan Keng Cheong (National Cheng Kung University)** *Symmetric products, Hilbert schemes, and the crepant resolution conjecture*
15:40—16:00	**Break**
Session Two	**Chair: Qi'an Guan (Peking University)**
16:00 –16:45	**Qile Chen (Columbia University)** *Logarithmic Gromov-Witten theory*
16:55—17:40	**Bohan Fang (Columbia University)** *Eynard-Orantin Recursion for the Orbifold Vertex*

Young Mathematician Forum
June 18 - June 21, 2013

June 19, 2013 Wednesday
Place: Conference Room,Second Floor,Jia Yi Bing Building,No 82 Jing chun yuan,PKU

Morning	
Session One	**Chair: Baohua Fu(Chinese Academy of Sciences)**
8:30—9:15	**Dawei Chen (Boston College)** *Extremal effective divisors on moduli space*
9:25--10: 10	**Yi Liu (Caltech)** *Quasi-Fuchsian subsurfaces and homology of closed hyperbolic 3-manifolds*
10:10—10:30	**Break**
Session Two	
10:30—11:15	**Botong Wang (Notre Dame University)** *Cohomology jump loci for quasi-projective varieties*
11:25—12:10	**Zhiyuan Li (Stanford)** *Noether-Lefschetz conjecture and automorphic cohomology*
Lunch	**Chang Chunyuan**
Afternoon	
Session One	**Chair: Weizhe Zheng (Chinese Academy of Sciences)**
14:00—14:45	**Xinyi Yuan (Berkeley)** *Heegner points and congruent number problem*
14:55—15:40	**Jilong Tong (Université de Bordeaux I)** *Torsors under an elliptic curves and Serre's pro-algebraic structure*
15:40—16:00	**Break**
Session Two	
16:00 –16:45	**Yunfeng Jiang (Imperial College)** *On the crepant transformation conjecture in Gromov-Witten theory*
16:55—17:40	**Yefeng Shen (IPMU, Japan / Stanford)** *Landau-Ginzburg/Calabi-Yau correspondence for elliptic orbifold $\mathbb{P}^1$*
18:30	**Banquet**

Young Mathematician Forum
June 18 - June 21, 2013

June 20, 2013 Thursday
Place: Conference Room,Second Floor,Jia Yi Bing Building,No 82 Jing chun yuan,PKU

Morning	
Session One	**Chair: Chenyang Xu** (***Beijing International Center for Mathematical Research***)
09:00—09:45	**Jian Song (Rutgers)** *Ricci flow and birational surgery*
09:55--10: 40	**Jian Ge (Max-Planck)** *1/4-pinched contact sphere theorem*
10:40—11:00	**Break**
Session Two	
11:00—11:45	**Chi Li (Stonybrook)** *Yau-Tian-Donaldson's correspondence for semistable Fano manifolds*
Lunch	***Shao Yuan***
Afternoon	
Session One	**Chair: Huayi Chen (Université Joseph Fourier)**
14:00—14:45	**Yongquan Hu (Université de Rennes I)** *The Breuil-Mézard conjecture for non-scalar split residual representations*
14:55—15:40	**Yongqi Liang (Université Paris Diderot)** *Rational points and zero-cycles on certain biquadratic bundles*
15:40—16:00	**Break**
Session Two	
16:00 –16:45	**Zongbin Chen (Ecole Polytechnique Fédérale de Lausanne)** *Cohomological purity of affine Springer fibers*
16:55—17:40	**Shanwen Wang (Università degli Studi di Padova)** *Nearly holomorphic modular forms and galois representations(after Urban andSkinner)*

June 21, 2013 Friday
Place: Conference Room,Second Floor,Jia Yi Bing Building,No 82 Jing chun yuan,PKU

Morning	Chair: Shaobo Gan (Peking University)
Session One	
09:00—09:45	**Dawei Yang (Jilin University)** *On density theorems of three-dimensional vector fields*
09:55--10: 40	**Pengfei Zhang (Peking University and UMass)** *A new family of convex billiard tables*
10:40—11:00	**Break**
Session Two	
11:00—11:45	**Gang Liao (IMPA Brazil)** *Rigidity and regularity*
Lunch	**Shao Yuan**
Afternoon	**Chair: Ruochun Liu** (***Beijing International Center for Mathematical Research***)
Session One	
14:00—14:45	**Yuan Yuan (Sylvester)** *Geometry for local holomorphic maps*
14:55—15:40	**Fang Wang (Veblen instructor, Princeton)** *On the Radiation Field for Wave Equations*
15:40—16:00	**Break**
Session Two	
16:00 –16:45	**Nan Li (Penn State)** *Shrinking Rigidity on Length Metric Spaces*
16:55—17:40	**Zhiwei Yun (Stanford)** *Rigid local systems and the inverse Galois problem*

Applied math

June 18, 2013 Tuesday
Room 1560, Sciences Building No.1, Peking University

Morning	
Session One	**Chair: Pingwen Zhang (Peking University)**
10:30-11:00	**Dongbin Xiu (The University of Utah)** *Multi-dimensional polynomial interpolation on arbitrary nodes*
11:00-11:30	**Jianfeng Lu (Duke University)** *Nonexistence Results for Energy Functionals with Competing Attracting and Repelling Interactions*
11:30-12:00	**Di Liu (Michigan State University)** *Multiscale modeling and computation of nano optical responses*
Lunch	**Chang chun yuan**
Afternoon	
Session One	**Chair : Jingping Yang (Peking University)**
14:00-14:30	**K.C. CHEUNG (University of Hong Kong)** *Mutual exclusivity revisited and an explicit lower bound on the Tail Value-at-Risk of a sum of risks*
14:30-15:00	**Xuedong He (Columbia University in the city of New York)** *Hope, Fear and Aspirations*
15:00-15:30	**Ying Jiao (Université Paris Diderot — Paris 7)** Enlargement *of filtrations and* asymmetric information *risks*
15:30-16:00	**Tea Time**
Session Two	**Chair: Yuan Yao (Peking University)**
16:00-16:30	**Lek-Heng Lim (University of Chicago)** *Tensors and hypermatrices*
16:30-17:00	**Shiqian Ma (The Chinese University of Hong Kong)** *An Extragradient-Based Alternating Direction Method for Convex Minimization*
17:00-17:30	**Hau-Tieng Wu (University of California,Berkeley)** **TBA**

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June 19, 2013 Wednesday
Room 1560, Sciences Building No.1, Peking University

Morning Session One	Chair: Zhifei Zhang (Peking University)
09:00-09:30	**Chongchun Zeng (Georgia Institute of Technology)** *Traveling water waves with compactly supported vorticity*
09:30-10:00	**Zhiwu Lin (Georgia Institute of Technology)** *Stability and invariant manifolds of traveling waves of 3D Gross-Pitaevskii equation .*
10:00-10:30	**Tea Time**
Session Two	**Chair: Hao Ge (Peking University)**
10:30-11:00	**Samuel Kou (Harvard University)** *Fast analysis of dynamic systems via Gaussian emulator*
11:00-11:30	**Jianhua Xing (Virginia Polytechnic Institute and State University)** *Application of the Zwanzig-Mori projection approach on model reduction and nonlinear time series analysis*
11:30-12:00	**Zhihua Zhang** **(Beijing Institute of Genomics, Chinese Academy of Sciences)** **TBA**
lunch	**Chang chun yuan**
Afternoon Session One	**Chair: Huazhong Tang (Peking University)**
14:00-14:30	**Dan Hu (Shanghai Jiaotong University)** **TBA**
14:30-15:00	**Xinwei Yu (University of Alberta)** *On Stationary Solutions of the 2D Doi-Onsager Model*
15:00-15:30	**Xiantao Li (Penn State University)** *A Hierarchy of coarse-graining molecular dynamics models*
15:30-16:00	**Tea Time**
Session Two	**Chair: Yuan Yao (Peking University)**
16:00-16:30	**Harrison Huibin Zhou (Yale University)** *Inference and Optimalities in Estimation of Gaussian Graphical*
16:30-17:00	**Junhui Wang（University of Illinois at Chicago）** *Joint estimation of sparse multivariate regression and conditional graphical models*

June 20, 2013 Thursday
Room 1560, Sciences Building No.1, Peking University

Morning Session One	Chair: Zhifei Zhang (Peking University)
09:00-09:30	**Hongjie Dong (Brown University)** *Elliptic and parabolic equations in polytopes with discontinuous coefficients*
09:30-10:00	**Ning Jiang (Tsinghua University)** **TBA**
10:00-10:30	**Tea Time**
Session Two	Chair：Hao Ge (Peking University)
10:30-11:00	**Wei Sun (The University of North Carolina at Chapel Hill)** *Statistical methods for cancer genomics*
11:00-11:30	**Sheng Zhong (University of California)** *Time-variant Clustering*
lunch	**Shao Yuan**
Afternoon Session One	Chair: Jingping Yang (Peking University)
14:00-14:30	**Zhen Wu (Shandong University)** *BSDEs with Markov chains:two-time-scale and weak convergence*
14:30-15:00	**Zuoquan Xu（The Hong Kong Polytechnic University）** *A Note on the Monge-Kantorovich Problem in the Plane*
15:00-15:30	**Ruodu Wang (University of Waterloo)** *Modelling Uncertainty of Dependence in Risk Aggregation*
15:30-16:00	**Nan Chen(The Chinese University of Hong Kong)** *Interconnected Balance Sheets, Market Liquidity, and Amplification Effects in a Financial System*

Young Mathematician Forum
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June 21, 2013 Friday
Room 1560, Sciences Building No.1, Peking University

Morning	
Session One	**Chair: Ruo Li (Peking University)**
09:00-09:30	**Zhijian Yang (Wuhan University)** **TBA**
09:30-10:00	**Ju Ming (Beijing Computational Science Research Center)** **TBA**
10:00-10:30	**Tea Time**
Session Two	**Chair: Ruo Li (Peking University)**
10:30-11:00	**Pingbing Ming (The Institute of Computational Mathematics and Scientific/Engineering Computing of Chinese Academy of Sciences)** *Ghost force for multiscale coupling method*
lunch	**Shao Yuan**