

Symplectic Geometry and Physics Workshop III: Symplectic Geometry and String Theory

Monday June 2, 2003

- 8:30–9:30 *Check-In/Light Breakfast (Hosted by IPAM)*
- 9:30–10:30 **Sergey Cherkis** (Institute for Advanced Studies, Princeton)
Asymptotically Locally Flat Hyperkahler Metrics of D-type
- 10:30–11:00 *Coffee Break*
- 11:00–12:00 **Chiu-Chu (Melissa) Liu** (Harvard University)
A conjectural formula of Marino-Vafa
- 12:00–2:00 *Lunch (on your own)*
- 2:00–3:00 **Naichung Conan Leung** (University of Minnesota, Twin Cities)
Instantons and Lagrangians in manifolds with vector cross product
- 3:00–3:30 *Break*
- 3:30–4:30 **Itzhak Bars** (University of Southern California)
Non Commutative Geometry and String Field Theory
- 4:30–5:00 *Break*
- 5:00–7:00 *Wine/Cheese Reception (Hosted by IPAM)*

Tuesday June 3, 2003

- 8:30–9:30 *Check-In/Light Breakfast (Hosted by IPAM)*
- 9:30–10:30 **David Morrison** (Duke University)
TBA
- 10:30–11:00 *Coffee Break*
- 11:00–12:00 **Chien-Hao Liu** (Harvard University)
 $S^{>1}</sup>$ fixed points in Quot-schemes, mirror principle, and the Hori-Vafa formula
- 12:00–2:00 *Lunch (on your own)*
- 2:00–3:00 **Sheldon Katz** (University of Illinois at Urbana-Champaign)
Open Gromov-Witten Invariants
- 3:00–3:30 *Break*
- 3:30–4:30 **Ludmil Katzarkov** (University of California, Irvine)
Homological Mirror Symmetry for Fano's and beyond



Wednesday June 4, 2003

- 8:30–9:30 *Check-In/Light Breakfast (Hosted by IPAM)*
- 9:30–10:30 **Jun Li** (Stanford University)
A vanishing theorem of the moduli of vector bundles on curves
- 10:30–11:00 *Coffee Break*
- 11:00–12:00 **Mina Aganagic** (Harvard University)
TBA
- 12:00–2:00 *Lunch (on your own)*
- 2:00–3:00 **Cumrun Vafa** (Harvard University)
The Topological Vertex
- 3:00–3:30 *Break*
- 3:30–4:30 **Xiaobo Liu** (University of Notre Dame)
Universal equations for Gromov-Witten invariants

Thursday June 5, 2003

- 8:30–9:30 *Check-In/Light Breakfast (Hosted by IPAM)*
- 9:30–10:30 **Kentaro Hori** (University of Toronto)
Orientifolds And Mirror Symmetry
- 10:30–11:00 *Coffee Break*
- 11:00–12:00 **Mark Gross** (UCSD / University of Warwick)
Affine manifolds and mirror symmetry
- 12:00–1:45 *Lunch (on your own)*
- 1:45–2:45 **Ron Donagi** (University of Pennsylvania)
Calabi-Yau integrable systems, matrix models, and open strings
- 2:45–3:15 *Break*
- 3:15–4:15 **Amer Iqbal** (Harvard University)
SU(M) Geometries and Topological String Amplitudes
- 4:15–4:30 *Break*
- 4:30–5:30 **Ai-Ko Liu** (University of California at Berkeley)
Algebraic Seiberg-Witten Invariants and Family Blowup Formula
- 5:30–7:30 *Dinner (Hosted by IPAM)*

Friday June 6, 2003

- 8:30–9:30 *Check-In/Light Breakfast (Hosted by IPAM)*
- 9:30–10:30 **Burt Ovrut** (University of Pennsylvania)
Vector Bundles and Superpotentials in Heterotic String Theory
- 10:30–11:00 *Coffee Break*
- 11:00–12:00 **Anton Kapustin** (Caltech / USC)
The Geometry of A-branes
- 12:00–2:00 *Lunch (on your own)*
- 2:00–3:00 **Emanuel Diaconescu** (Rutgers University)
Extremal Transitions in Gromov-Witten Theory

