

Program (Tentative)

Monday, June 18

8:45-9:00 Opening address by Motoko Kotani (Tohoku University)

9:00-9:50 Mohammed Abouzaid (Columbia University)

Homological mirror symmetry via families of Lagrangians

9:50-10:40 Nima Arkani-Hamed (IAS)

TBA

10:40-11:20 Coffee break

11:20-12:10 Maissam Barkeshli (University of Maryland)

TBA

12:10-14:00 Lunch

14:00- 14:50 Francis Brown (Oxford University)

Open and closed superstring amplitudes in genus 0 and 1

14:50-15:40 Masahito Yamazaki (Kavli IPMU)

Integrability as Duality

[Moving to Sakura Hall, Katahira Campus]

17:00- 18:30 Gong Show

18:30- 20:30 Welcome reception (All participants are invited)

Tuesday, June 19

9:00-9:50 Antonella Grassi (University of Pennsylvania)

Terminal singularities and F-theory

9:50-10:40 Jeffrey Harvey (University of Chicago)

Hecke relations in rational conformal field theory

10:40-11:20 Coffee break

11:20-12:10 Mikhail Kapranov (Kavli IPMU)

Perverse schobers and applications

12:10-14:00 Lunch

14:00-14:50 Christoph Keller (ETH Zurich)

Holographic orbifold CFTs

14:50-15:30 Coffee break

15:30-16:20 Zohar Komargodski (Simons Center)

TBA

16:20-17:10 Marcos Marino (University of Geneva)

Topological strings, resurgence, and quantum mechanics

Wednesday, June 20

9:00-9:50 Victor Mikhaylov (Simons Center)

Teichmüller TQFT, complex Chern-Simons theory and duality

9:50-10:40 Gregory Moore (Rutgers University)

On four-manifolds and $N=2$ supersymmetric field theory.

10:40-11:20 Coffee break

11:20-12:10 David Morrison (UC Santa Barbara)

TBA

Afternoon Free

Thursday, June 21

9:00-9:50 Hiraku Nakajima (Kavli IPMU)

3d $N=4$ QFT and ring objects on the affine Grassmannian

9:50-10:40 Tony Pantev (University of Pennsylvania)

Mirror symmetry, intersection of quadrics, and Hodge theory

10:40-11:20 Coffee break

11:20-12:10 Leonardo Rastelli (Stony Brook University)
TBA

12:10-14:00 Lunch

14:00-14:50 Jörg Teschner (University of Hamburg)
Quantum curves, integrability and topological string partition functions

14:50-15:30 Coffee break

15:30-16:20 Yukinobu Toda (Kavli IPMU)
Birational geometry for d-critical loci and wall-crossing in Calabi-Yau 3-folds

16:20-17:10 Mirjam Cvetič (University of Pennsylvania)
Global constraints on matter representations in F-theory

19:00-21:00 Banquet (reception starts at 18:30)

Friday, June 22

Special Sessions for celebrating the Anniversaries of CY, TFT and Topological String

9:00-9:50 Edward Witten (IAS)
Open-closed topological gravity In two dimensions

9:50-10:40 Cumrun Vafa (Harvard University)
Topological strings on compact CY and SCFT's

10:40-11:20 Coffee break

11:20-12:10 Mina Aganagic (UC Berkeley)

Knot Categorification from Geometry, via String Theory

12:10-14:00 Lunch

14:00-14:50 Dan Freed (University of Texas at Austin)

Extended topological field theory and the 2-dimensional Ising model

14:50-15:30 Coffee break

15:30-16:20 Andrew Neitzke (University of Texas at Austin)

Abelianization in complex Chern-Simons theory

16:20-17:10 Si Li (Tsinghua University)

Semi-infinite Hodge structure: from BCOV theory to Seiberg-Witten geometry

17:10-17:20 Closing remark by Ron Donagi (University of Pennsylvania)

Special Lecture on the Fifth Anniversary of the Tohoku Forum for Creativity

17:30-18:20 Shing-Tung Yau (Harvard University)

Brief history of Calabi Yau manifold related to string theory