

Program

Development of Moduli Theory: Lecture Series

June 11 – 14, 2013

Kyoto University, RIMS, Room 420

- **Igor Dolgachev (University of Michigan)**
Introduction to the theory of Enriques surfaces
- **Eduard Looijenga (Utrecht University)**
Moduli spaces and Shimura varieties
- **Hiraku Nakajima (Kyoto University)**
Instanton and representation theory
- **Iku Nakamura (Hokkaido University)**
Compactification of the moduli of abelian varieties
- **Carlos Simpson (Université de Nice-Sophia Antipolis)**
A study of moduli of stable bundles

	June 11	June 12	June 13	June 14
10:00 – 11:00	Nakamura	Nakamura	Nakamura	Looijenga
11:30 – 12:30	Dolgachev	Dolgachev	Dolgachev	Nakajima
14:30 – 15:30	Looijenga	Simpson	Nakajima	Simpson
16:00 – 17:00	Nakajima	Looijenga	Simpson	_____

Development of Moduli Theory: Conference

June 17–21, 2013

Kyoto University, RIMS, Room 420

June 17

- 11:00–12:00 **Igor Dolgachev (University of Michigan)**
Rational self-maps of moduli spaces
- 14:00–15:00 **Bumsig Kim (Korea Institute for Advanced Study)**
Quasimap invariants and Mirror maps
- 15:30–16:30 **Eduard Looijenga (Universiteit Utrecht)**
Ball quotients and arrangements

June 18

- 10:00–11:00 **Valery Alexeev (University of Georgia)**
Degenerations of Prym–Tyurin varieties
- 11:30–12:30 **Iku Nakamura (Hokkaido University)**
Complete moduli spaces of degenerate abelian varieties
- 14:30–15:30 **Carlos Simpson (Université de Nice-Sophia Antipolis)**
Behavior at infinity of the correspondences between moduli spaces of representations, bundles with connection, and Higgs bundles
- 16:00–17:00 **Takuro Mochizuki (Kyoto University)**
Nahm transforms for harmonic bundles

June 19

- 10:00 – 11:00 **Gavril Farkas (Humboldt Universität zu Berlin)**
Mukai models for moduli spaces of odd theta characteristics
- 11:30 – 12:30 **Daniel Huybrechts (Universität Bonn)**
Curves and cycles on K3 surfaces
- 14:30 – 15:30 **Tom Bridgeland (University of Oxford)**
Derived categories of K3 surfaces
- 16:00 – 17:00 **Shigeru Mukai (Kyoto University)**
Fano 3-folds, moduli and automorphism groups etc.

June 20

- 10:00 – 11:00 **Brendan Hassett (Rice University)**
del Pezzo fibrations and K3 surfaces
- 11:30 – 12:30 **JongHae Keum (Korea Institute for Advanced Study)**
Orders of automorphisms of K3 surfaces
- 14:30 – 15:30 **Hiraku Nakajima (Kyoto University)**
Perverse sheaves on instanton moduli spaces and AGT conjecture
- 16:00 – 17:00 **Kōta Yoshioka (Kobe University)**
Bridgeland stability and stable sheaves on abelian surfaces

June 21

- 10:00 – 11:00 **Radu Laza (Stony Brook University)**
Hermitian variations of Hodge structure of Calabi–Yau type
- 11:30 – 12:30 **Viacheslav V. Nikulin (University of Liverpool)**
Kählerian K3 surfaces and Niemeier lattices