

D-modules and Hodge theory

2017 January 23 – 27
Kavli IPMU, Lecture hall

Program

January 23, Monday

- 13:00–14:00 **Takuro Mochizuki** (RIMS)
Mixed twistor D-modules and some examples, I
- 14:15–15:15 **Takahiro Saito** (University of Tsukuba)
Limit mixed Hodge structures of families of algebraic varieties and their applications
- 15:45–16:45 **Kevin McGerty** (University of Oxford)
Kirwan surjectivity for quiver varieties

Reception at cafeteria

January 24, Tuesday

- 10:00–11:00 **Jean-Baptiste Teyssier** (University of Leuven)
Skeletons and moduli of Stokes torsors
- 11:15–12:15 **Kiran Kedlaya** (University of California)
Resolution of turning points in zero and mixed characteristic
- Lunch Break
- 13:30–14:30 **Yalong Cao** (Kavli IPMU)
Donaldson-Thomas theory for Calabi-Yau 4-folds
- 14:45–15:45 **Yota Shamoto** (RIMS)
An analog of the Dubrovin conjecture
- 16:30–17:30 **Luis Narvaez Macarro** (University of Seville)
Around the symmetry of the roots of Bernstein-Sato polynomials

January 25, Wednesday

- 9:45–10:45 **Takuro Mochizuki** (RIMS)
Mixed twistor D-modules and some examples, II
- 11:00–12:00 **Kiran Kedlaya** (University of California)
Nonarchimedean differential equations and turning points
- 12:15–13:15 **Andrea D’Agnolo** (University of Padova)
On the Riemann-Hilbert correspondence for irregular holonomic D-modules, I

January 26, Thursday

- 10:00–11:00 **Toshiro Kuwabara** (University of Tsukuba)
Deformation-quantization of jet bundles over symplectic manifolds and affine W-algebras
- 11:15–12:15 **Yoshiki Oshima** (Kavli IPMU)
Tropical geometric compactifications and Satake compactifications
- Lunch Break
- 13:30–14:30 **Tatsuki Kuwagaki** (University of Tokyo)
On the coherent-constructible correspondence
- 14:45–15:45 **Jörg Schürmann** (University of Münster)
Characteristic classes of mixed Hodge modules
- 16:30–17:30 **Mikhail Kapranov** (Kavli IPMU)
Perverse schobers and topological Fukaya categories with coefficients

January 27, Friday

- 10:00–11:00 **Andrea D’Agnolo** (University of Padova)
On the Riemann-Hilbert correspondence for irregular holonomic D-modules, II
- 11:15–12:15 **Hélène Esnault** (Free University of Berlin)
TBA

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Organizers: Kyoji Saito, Kiyoshi Takeuchi, Tomoyuki Abe