

# Homological Methods in Algebra, Geometry & Physics

City University London

## Wednesday 23 July

- 10:15 Registration & tea/coffee
- 11:00 **Chris Braun** *Noncommutative localisation of algebras and modules*
- 12:00 **Richard Hepworth** *String topology of classifying spaces*
- 1:00 Lunch
- 2:30 **Benoit Fresse** *Koszul duality and homotopy automorphisms of operads*
- 3:30 Tea/coffee
- 4:00 **Wajid Mannan** *Closed model category structures for coalgebras and curved Lie algebras*
- 5:00 **Theodore Voronov** *Homological vector fields, higher Koszul brackets and related structures*

## Thursday 24 July

- 9:30 **Christoph Schweigert** *Boundary conditions and defects in three-dimensional topological field theory*
- 10:30 Tea/coffee
- 11:00 **Dennis Borisov** *Virtual fundamental classes for moduli spaces of sheaves on Calabi-Yau four-folds*
- 12:00 **Hovhannes Khudaverdian** *Geometrical foundations of the Batalin-Vilkovisky formalism*
- 1:00 Lunch
- 2:30 **Raphaël Rouquier** *Perverse equivalences and higher representations*
- 3:30 Tea/coffee
- 4:00 **Peter Jørgensen** *The cluster categories of Igusa and Todorov*
- 7:30 Conference Dinner

## Friday 25 July

- 9:30 **Alastair Hamilton** *Noncommutative BV-formalism, functional integrals and pairing classes in the moduli space of Riemann surfaces*
- 10:30 Tea/coffee
- 11:00 **Benjamin Ward** *Universal operations and cyclic operads*
- 12:00 **Vladimir Hinich** *Rectification of operad algebras*
- 1:00 Lunch
- 2:30 **Isamu Iwanari** *Tannaka duality theory in derived algebraic geometry and applications*
- 3:30 **Alexander Voronov**  *$r_\infty$ -matrices and quantum  $\infty$ -groups*