

Workshop on  
“Categorification in quantum topology and beyond”

January 7 – 18, 2019

organized by

Nils Carqueville (ESI, U Vienna), Anton Mellit (U Vienna),  
Paul Wedrich (Australian National U, Canberra)

Week 1

January 7 – 11, 2019

• **Monday, January 7, 2019**

09:00 – 09:30 **Registration**

09:30 – 10:30 **Anthony Licata**

*Braids and stability conditions 1*

10:30 – 11:00 *Coffee / Tea Break*

11:00 – 12:00 **Zsuzsanna Dancso**

*Quantised lattices and combinatorics*

12:00 – 12:30 *Discussion*

12:30 – 14:15 *Lunch Break*

14:15 – 15:15 **Thang Le**

*Skein algebras of surfaces 1*

15:15 – 15:45 *Coffee / Tea Break*

15:45 – 16:45 **Louis-Hadrien Robert**

*Categorification of 1 and of the Alexander polynomial*

• **Tuesday, January 8, 2019**

09:00 – 10:00 **Anthony Licata**

*Braids and stability conditions 2*

10:00 – 10:30 *Coffee / Tea Break*

10:30 – 11:30 **Nicolle Sandoval Gonzalez**

*Categorical Bernstein operators and the boson–fermion correspondence*

11:30 – 12:30 **Thang Le**

*Skein algebras of surfaces 2*

12:30 – 14:15 *Lunch Break*

14:15 – 15:15 **Matthew Hogancamp**

*Curved Soergel bimodules and deformed Khovanov–Rozansky homology 1*

15:15 – 15:45 *Coffee / Tea Break*

15:45 – 16:45 *Discussion*

• **Wednesday, January 9, 2019**

09:00 – 10:00 **Anthony Licata**

*Braids and stability conditions 3*

10:00 – 10:30 *Coffee / Tea Break*

10:30 – 11:30 **Juliet Cooke**

*Factorisation Homology and Skein Algebras*

11:30 – 12:30 **Thang Le**

*Skein algebras of surfaces 3*

12:30 – 15:15 *Lunch Break*

15:15 – 16:15 **Tony Licata** Colloquium at Uni Wien

*Khovanov's Heisenberg category*

• **Thursday, January 10, 2019**

09:00 – 10:00 **Anthony Licata**

*Braids and stability conditions 4*

10:00 – 10:30 *Coffee / Tea Break*

10:30 – 11:30 **Hoel Queffelec**

*Surface skein algebras and categorification*

11:30 – 12:30 **Thang Le**

*Skein algebras of surfaces 4*

12:30 – 14:15 *Lunch Break*

14:15 – 15:15 **Matthew Hogancamp**

*Curved Soergel bimodules and deformed Khovanov-Rozansky homology 2*

15:15 – 15:45 *Coffee / Tea Break*

15:45 – 16:45 **Tina Kanstrup**

*Link homology and Hilbert schemes*

• **Friday, January 11, 2019**

09:00 – 10:00 **Sergei Gukov**

*Categorification of WRT invariants of 3-manifolds 1*

10:00 – 10:30 *Coffee / Tea Break*

10:30 – 11:30 **Alexandra Anokhina**

*Why there are asymptotic analytic formulas for homological knot invariants?*

11:30 – 12:30 **Sergei Gukov**

*Categorification of WRT invariants of 3-manifolds 2*

12:30 – 14:15 *Lunch Break*

14:15 – 15:15 *Discussion*

15:15 – 15:45 *Coffee / Tea Break*

15:45 – 16:45 *Discussion*

**All talks, except the colloquium on Wednesday, take place at ESI, Boltzmann Lecture Hall.**