

**Gauge Theory and Topology**  
**24-28 July 2023**  
**L1**

**Schedule**

**Monday, 24 July**

- 10:00-10:30 Registration
- 10:30-11:30 Rosa Sena-Dias, *Einstein metrics from the Calabi ansatz via Derdziński duality*
- 11:45-12:45 Steven Sivek, *Homology  $RP^3$ s and  $SL(2, C)$*
- 12:45-14:30 Lunch
- 14:30-15:30 Raphael Zentner,  *$SL(2, C)$ -character varieties of knots and maps of degree 1*
- 15:30-16:00 Coffee
- 16:00-17:00 Andras Juhász, *The unknotting number, hard unknot diagrams, and Reinforcement Learning*

**Tuesday, 25 July**

- 9:00-10:00 Ian Zemke, *Perspectives on the Heegaard Floer surgery formulas*
- 10:00-10:30 Coffee
- 10:30-11:30 Yi Xie, *Kontsevich's characteristic classes and the diffeomorphism groups of 4-manifolds*
- 11:45-12:45 Zoltan Szabó, *Knot Floer homology and Pong algebras*
- 12:45-14:30 Lunch
- 14:30-15:30 Peter Ozsváth, *Constructions in bordered Floer homology*
- 15:30-16:00 Coffee
- 16:00-17:00 Kristen Hendricks, *Naturality issues in involutive Heegaard Floer homology*

**Wednesday, 26 July**

- 9:00-10:00 Maggie Miller, *Splitting spheres in  $S^4$*
- 10:00-10:30 Coffee
- 10:30-11:30 Joshua Wang, *Progress towards the colored  $sl(N)$  homology of  $T(2, m)$*
- 11:45-12:45 Nigel Hitchin, *ALE spaces revisited*

**Thursday, 27 July**

- 10:00-11:00 Lisa Piccirillo, *Building closed exotic manifolds by hand*
- 11:00-11:30 Coffee
- 11:30-12:30 Hokuto Konno, *Exotic Dehn twists on 4-manifolds*
- 12:30-14:00 Lunch
- 14:00-15:00 Arunima Ray, *Surfaces in 4-manifolds*
- 15:00-15:30 Coffee
- 15:30-17:00 Tom Mrowka, *Thirty years of working with Peter*

**Friday, 28 July**

- 10:00-11:00 Mohammed Abouzaid, *Floer homotopy as a bordism theory*
- 11:00-11:30 Coffee
- 11:30-12:30 Hiraku Nakajima, *Coulomb branches and singular monopole moduli*
- 12:30-14:30 Lunch
- 14:30-15:30 Ali Daemi, *The knot complement problem for nullhomotopic knots*
- 15:30-16:00 Coffee
- 16:00-17:00 Daniel Ruberman, *Homotopy properties of diffeomorphism groups and spaces of positive scalar curvature on 4-manifolds*