

# Program

## Monday, February 13, 2023

9:30-10:00 Registration and Opening

10:00-11:30 **Jürgen Jost** Discrete Ricci and sectional curvatures for metric spaces and networks 1

11:30-12:00 Coffee break

12:00-13:30 **Jürgen Jost** Discrete Ricci and sectional curvatures for metric spaces and networks 2

13:30-14:30 Lunch

14:30-16:00 **Omer Bobrowski** Universality in Random Persistence Diagrams

16:00-16:30 Coffee break

16:30-17:00 **Yinon Nachshon & Paz Naim** Ricci curvature and the stream of associations

17:00-18:30 **David Gu** Optimal transport for generative model

## Tuesday, February 14, 2023

9:30-11:10 **Michael Farber** Algebraic topology and autonomous robot motion 1

11:00-11:30 Coffee break

11:30-13:00 **Michael Farber** Algebraic topology and autonomous robot motion 2

13:00-14:00 Lunch

14:00-19:00 Excursion and festive dinner

## Wednesday, February 15, 2023

9:30-11:00 **Florentin Münch** Discrete Ricci curvature and semigroup estimates

11:00-11:30 Coffee break

11:30-13:00 **Florentin Münch** Discrete Ricci curvature and homology

13:00-14:00 Lunch

14:00-16:00 **Posters and short talks session**

**Anna Song** Distance Function for MEG Numerical Cognitive Tasks Trials

**Yohai Reani** Cycle Registration in Persistent Homology with Applications in Topological  
Bootstrap

**Roan Talbut** Wasserstein Distances on Tropical Projective Torii of Different Dimensions

16:00-16:30 Coffee break

16:30-18:00 **David Gu** Abel-Jacobi theory for meshing

## Thursday, February 16, 2023

9:30-11:00 **Arejit Samal** Geometry-inspired measures with wide applications in network science

11:00-11:30 Coffee break

11:30-13:00 **Emil Saucan** Metric curvatures for networks

13:00-14:00 Lunch

14:00-15:30 **Emil Saucan** Discrete Morse Theory, Persistent Homology and Ricci curvature

15:30-16:00 Coffee break

16:00-17:30 **Anthea Monod** Some ideas for algebraic topology and tropical geometry in statistics and machine learning

17:30-18:00 **Alon Katz** Distance Function for MEG Numerical Cognitive Tasks Trials

## Friday, February 17, 2023

9:30-11:00 **Kelin Xia** Mathematical AI for molecular data analysis

11:00-11:30 Coffee break

11:30-13:00 **Matthias Keller** Dirichlet forms on graphs, intrinsic metrics and the heat equation

13:00-13:15 Closing & Good Bye