### Sunday

Jesus Gonzalez, Topological complexity: an algebraic topology model to the motion planning problem in robotics

Roman Srzednicki, On a problem of Whitney and the retract theorem of Ważewski Ran Levi, Topological analysis of neural networks

## Monday

Gunnar Carlsson, Local to global principles for persistent homology Dmitry Feichner-Kozlov, Topology of complexes arising in models for Distributed Computing

Vitaliy Kurlin, Topological methods for a faster materials discovery

Mark Grant, Symmetrized topological complexity

Yasuaki Hiraoka, Limit theorem for persistence diagrams and related topics

Francisco Belchi-Guillamon, A∞-persistence

Matthew Zabka, A Random Bockstein Operator

Steven Simon, Hyperplane Equipartitions Plus Constraints

Dejan Govc, An Approximate Nerve Theorem

Michael Catanzaro, Stochastic Dynamics on CW complexes

Edivaldo dos Santos, On the Bourgin−Yang theorem

## Tuesday

Alexander Dranishnikov, On topological complexity and LS-category
Roy Meshulam, Concurrency Theory and Subspace Arrangements
Rade Zivaljevic, Topological methods in discrete geometry; new developments
Washington Mio, Stable Local Persistent Homology
Kathryn Hess, Topology meets neuroscience
Nicholas Scoville, A Persistent Homological Analysis of Network Data Flow
Malfunctions

Jose Antonio Vilches, Strong discrete Morse theory

Simon Willerton, *Instantaneous dimension of metric spaces via spread and magnitutude* 

Jan Spaliński, Some applications of persistent cohomology
Mehmetcik Pamuk, Perfect discrete Morse functions on connected sums
Ahmad Yousefian Darani, Zariski topology on the spectrum of strongly prime submodules

#### Wednesday

Janos Pach, A dual of Tarski's plank problem: Using a fixed point theorem
Piotr Sułkowski, Topological recursion, counting of chord diagrams, and classification of RNA complexes

Lucile Vandembroucq, Topological complexity of the Klein bottle Bogdan Batko, Conley index for discrete multivalued dynamical systems and the dynamics reconstruction problem

## Thursday

Pavle Blagojevic, Shadows of Cohen's Vanishing theorem
Jarosław Buczyński, Constructions of k-regular maps using finite local schemes
Peter Franek, Solving Equations and Optimization Problems with Uncertainty
Frank Lutz, On the Topology of Steel

Mikael Vejdemo-Johansson, *Topology in the Furnace — using topology to find failure modes in industrial models* 

Jose Carrasquel, *Topological complexity and efficiency of motion planning algorithm* 

Sinisa Vrecica, Multiple chessboard complexes and theorems of Tverberg type Grzegorz Jablonski, Collapsing Cech to Delaunay complexes in persistence of sampled dynamical systems

David Recio-Mitter, *Topological complexity of subgroups of the braid groups*Mahender Singh, *Equivariant maps between representation spheres of Lie groups* 

# Friday

Wojciech Chacholski, What is persistence?

Jacek Brodzki, *The Geometry of Synchronization Problems and Learning Group Actions* 

Petar Pavesic, Topological complexity of fibrations and covering maps Miroslav Kramar, Analysis of Time Scales in Complex Spatio-Temporal Systems Frederic Chazal, Estimating the Reach of a Manifold

Steven Ellis, Persistent Homology of Independence of Groups of Binary Variables Krzysztof Ziemiański, Directed paths on cubical complexes

Leonid Plachta, On discretized configuration spaces

Sergio Ardanza-Trevijano, *Topological data analysis on particulate materials* Fedor Manin, *Counting thick embeddings* 

Marek Kaluba, Certifying numerical estimates of spectral gaps