

ATMCS8
Applied Topology: Methods, Computation and Science
IST Austria, Klosterneuburg, June 25-29, 2018

Time	Program June 25	Speaker	Room
08:00	Conference Shuttle leaves from Wien Heiligenstadt – Klosterneuburg Weidling - Niedermarkt Klosterneuburg - Pension Alte Mühle	Pick up in front of Boschstraße	Heiligenstadt station,
08:30-09:30	<i>Registration</i>		Foyer
09:30	Welcome Address by Thomas Henzinger, President, IST Austria		RLH
09:45-10:45	Invited talk Inv-01 Integrating topology and geometry into vehicle tracking systems	Paul Bendich	RLH
10:45-11:15	<i>Coffee Break</i>		Foyer
11:15-12:15	Invited talk Inv-02 Learning orientations in a topological map: a neuronal model	Yuri Dabaghian	RLH
12:15-14:00	<i>Lunch Break</i>		Cafeteria
14:00-14:30	Contributed talk Con-01 Stabilizing auxiliary persistence information	Alexander Wagner and Peter Bubenik	RLH
14:30-15:00	Contributed talk Con-02 Persistence codebooks for topological data analysis	Matthias Zeppelzauner, Mateusz Juda and Bartosz Zielinski	RLH
15:00-15:30	Contributed talk Con-03 Topological data analysis, roughness, and human red blood cells	Yu-Min Chung, Madalena Costa, Ary Goldberger and Sarah Day	RLH
15:30-16:00	<i>Coffee Break</i>		Foyer
16:00-16:30	Contributed talk Con-04 Spanners for topological summaries	Michael Kerber and Arnur Nigmatov	RLH
16:30-17:00	Contributed talk Con-05 Persistence landscapes are graded persistence diagrams	Leo Betthausen, Peter Bubenik, Parker Edwards	RLH
17:00-20:00	<i>Poster Session</i>		
20:00	Conference Shuttle leaves for Pension Alte Mühle - Niedermarkt Klosterneuburg - Klosterneuburg Weidling - Wien Heiligenstadt		

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Time	Program June 26	Speaker	Room
08:00	Conference Shuttle leaves from Wien Heiligenstadt – Klosterneuburg Weidling - Niedermarkt Klosterneuburg - Pension Alte Mühle	Pick up in front of	Heiligenstadt station, Boschstraße
09:00-09:30	<i>Registration</i>		Foyer
09:30-10:30	Invited talk Inv-03 Applications of algebraic topology in combinatorics and geometry	Imre Barany	RLH
10:30-11:00	<i>Coffee Break</i>		Foyer
11:00-12:00	Invited talk Inv-04 Real multiparameter persistent homology	Ezra Miller	RLH
12:00-14:00	<i>Lunch Break</i>		Cafeteria
14:00-14:30	Contributed talk Con-06 On the NP-hardness of computing stabilized Betti numbers	Oliver Gäfvert and Wojciech Chachólski	RLH
14:30-15:00	Contributed talk Con-07 Stable signatures for dynamic data via persistent homology	Woojin Kim and Facundo Mémoli	RLH
15:00-15:30	Contributed talk Con-08 Persistent homology methods for asymmetric networks	Samir Chowdhury and Facundo Mémoli	RLH
15:30-16:00	<i>Coffee Break</i>		Foyer
16:00-16:30	Contributed talk Con-09 Computational topology with Gudhi	Pawel Dlotko	RLH
16:30-17:00	Contributed talk Con-10 Persistent homology and the upper box dimension	Benjamin Schweinhart	RLH
17:15	Short walk through the Vienna Woods to the Conference Dinner		
18:00	<i>Conference Dinner</i>		Redlinger Hütte
21:00	Conference Shuttle leaves for Pension Alte Mühle - Niedermarkt Klosterneuburg - Klosterneuburg Weidling - Wien Heiligenstadt		

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Time	Program June 27	Speaker	Room
08:00	Conference Shuttle leaves from Wien Heiligenstadt – Klosterneuburg Weidling - Niedermarkt Klosterneuburg - Pension Alte Mühle	Pick up in front of Boschstraße	Heiligenstadt station,
09:00-09:30	<i>Registration</i>		Foyer
09:30-10:30	Invited talk Inv-05 Connected components strike back	Dmitriy Morzov	RLH
10:30-11:00	<i>Coffee Break</i>		Foyer
11:00-12:00	Invited talk Inv-06 Multivariate methods in topological data analysis	Martina Scalamiero	RLH
12:15	Departure for the excursion to the Wachau		
13:00-15:15	<i>Lunch Break</i>		Stockingerhof
15:15-15:30	Walk to the Dürnstein Abbey		
15:30-16:30	Guided tour of the Dürnstein Abbey		
16:45-17:30	Wine tasting at the Dürnstein Abbey		
17:45	Transfers back to Wien Heiligenstadt/Niedermarkt Klosterneuburg – IST Austria		

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Time	Program June 28	Speaker	Room
08:00	Conference Shuttle leaves from Wien Heiligenstadt – Klosterneuburg Weidling - Niedermarkt Klosterneuburg - Pension Alte Mühle	Pick up in front of Boschstraße	Heiligenstadt station,
09:00-09:30	<i>Registration</i>		Foyer
09:30-10:30	Invited talk Inv-07 Random simplicial complexes	Nati Linial	RLH
10:30-11:00	<i>Coffee Break</i>		Foyer
11:00-12:00	Invited talk Inv-08 Bialgebras versus 3-manifolds	Sergei Matveev	RLH
12:00-14:00	<i>Lunch Break</i>		Cafeteria
14:00-14:30	Contributed talk Con-11 Semantic folding at Cortical.io	Erik Graf, Cortical.io, Vienna	RLH
14:30-15:00	Contributed talk Con-12 Multiparameter persistence via geometric topology	Peter Bubenik, Michael Catanzaro	RLH
15:00-15:30	Contributed talk Con-13 Distributed computability against adversaries via combinatorial topology	Vikram Saraph and Maurice Herlihy	RLH
15:30-16:00	<i>Coffee Break</i>		Foyer
16:00-16:30	Contributed talk Con-14 A computational framework for connection matrices	Shaun Harker, Konstantin Mishaikow, Kelly Spendlove, and Robert Vandervorst	RLH
16:30-17:00	Contributed talk Con-15 Computing immersibility	Fedor Manin, Shmuel Weinberger	RLH
17:00-20:00	Panel discussion		RLH
20:00	Conference Shuttle leaves for Pension Alte Mühle - Niedermarkt Klosterneuburg - Klosterneuburg Weidling - Wien Heiligenstadt		

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08:00	Conference Shuttle leaves from Wien Heiligenstadt – Klosterneuburg Weidling - Niedermarkt Klosterneuburg - Pension Alte Mühle	Pick up in front of Boschstraße	Heiligenstadt station,
09:00-09:30	<i>Registration</i>		Foyer
09:30-10:30	Invited talk Inv-09 Learning topological state of matter and topological state transition	Francesco Vaccarino	RLH
10:30-10:40	Break		
10:40-11:40	Invited talk Inv-10 On algorithmic aspects of topological problems	Lukas Vokrinek	RLH
11:40	<i>Lunch (optional)</i>		Cafeteria
12:15	Conference Shuttle leaves for Pension Alte Mühle - Niedermarkt Klosterneuburg - Klosterneuburg Weidling - Wien Heiligenstadt		