Groups and Computation: interaction between geometric group theory, computability and computer science

June 26-30, 2017. Stevens Institute of Technology

Speakers
Laszlo Babai, University of Chicago
Jean-Camille Birget, Rutgers-Camden
Alexandre Borovik, University of Manchester
Tullio Ceccherini-Silberstein, University of Sannio
Michel Coornaert, University of Strasbourg
Volker Diekert, University of Stuttgart
Rod Downey, Victoria University of Wellington
Johanna Franklin, Hofstra University
Dominik Gruber, ETH Zürich
Yuri Gurevich, Microsoft Research
Susan Hermiller, University of Nebraska-Lincoln
Denis Hirschfeldt, University of Chicago
Derek Holt, University of Warwick
Olga Kharlampovich, Hunter College of CUNY
Anastasia Khukhro, University of Neuchatel
Timothy McNicholl, Iowa State University
Charles Miller III, University of Melbourne
Denis Osin, Vanderbilt University
Dominique Perrin, University of Marne-la-Vallée
Sarah Rees, Newcastle University
Mark Sapir, Vanderbilt University
Saul Schleimer, University of Warwick
Gérard Sénizergues, University of Bordeaux
Moshe Vardi, Rice University
Pascal Weil, University of Bordeaux
Daniel Wise, McGill University

Scientific committee
Bob Gilman and Alexei Miasnikov
Stevens Institute of Technology
Carl Jockusch and Ilya Kapovich
University of Illinois at Urbana-Champaign

Local organizing committee
Bob Gilman, Denis Serbin, Mahmood Sohrabi,
Nicholas Touikan, and Sasha Ushakov
Stevens Institute of Technology

Group theory, computability and algorithms have been inextricably intertwined since the fundamental papers of Max Dehn. The basis of all undecidability results in group theory and topology is the unsolvability of the word problem for finitely presented groups. There are many close links between group theory and automata theory and logic. The asymptotic-generic point of view of geometric group theory has recently led to new ideas in computational complexity and the theory of computability. This conference will explore several aspects of these connections.

The conference is dedicated to 80th birthday of Paul Schupp, whose work has played a central role in these developments.

Sponsors
This conference is supported by the National Science Foundation and the School of Engineering and Science and the Department of Mathematical Sciences at the Stevens Institute of Technology.

http://web.stevens.edu/algebraic/Schupp/