Programme for the Dagstuhl Seminar Algorithmic Problems in Group Theory

Monday, 25.3.2019

9:00-9:30: Opening

9:30-10:15: Armin Weiß
The power word problem in free groups

10:15-10:45: Coffee break

10:45-11:15: Pascal Weil
stallings_graphs, a Sagemath package to experiment with subgroups of free groups

11:15-11:45: Jordi Delgado
Enriched pullbacks and the intersection problem

11:45-12:15: Enric Ventura Capell
How to compute the stable image of an endomorphism?

12:15-14:00: Lunch break

14:00-14:30: Igor Potapov
Reachability problems in matrix semigroups

14:30-15:00: Andrew Duncan
One-relator quotients of partially commutative groups

15:00-16:00: Coffee break

16:00-16:45: Participant's self introduction

16:45-17:15: Ilya Kapovich
Wikipedia and groups

Tuesday, 26.3.2019

9:00 - 9:45 Olga Kharlampovich
Equations and model theory in one relator groups

9:45-10:15: Bettina Eick
Conjugacy problems in GL(n,Z)

10:15-10:45: Coffee break

10:45-11:30: Tim Riley
Conjugator length

11:30-12:00: Vladimir Shpilrain
Unconditionally secure public key transport (with possible errors)

12:15-14:00: Lunch break

14:00-14:45: Georg Zetzsche
Rational subsets of wreath products

14:45-15:05: Montserrat Casals-Ruiz
On the positive theory of groups acting on trees

15:05-15:25: Ilya Kazachkov
On model theory of graph products of groups

15:30-16:00: Coffee break

16:00-16:30: Tatiana Smirnova-Nagnibeda
Infinite Ramanujan graphs

16:30-18:00: Open problem session

Wednesday, 27.3.2019

9:00-9:45: Paul Schupp
Of Coarse: Closures of Turing Degrees

9:45-10:15: Laura Ciobanu Radomirovic
Solving equations in hyperbolic groups I

10:15-10:45: Coffee break

10:45-11:15: Murray Elder
Solving equations in hyperbolic groups II

11:15-12:00: Alexei Miasnikov
Malcev's problems, weak second order logic, and rich groups

12:15-14:00: Lunch break

14:00-18:00: Excursion

Thursday, 28.3.2019

9:00-9:45: Alina Vdovina
Ramanujan cubical complexes and non-residually finite CAT(0) groups in any dimension

9:45-10:15: Laurent Bartholdi
Decision problems in self-similar and automata groups

10:15-10:45: Coffee break

10:45-11:15: Volodia Nekrashevych
Non-deterministic automata and group theory

11:15-12:00: Ben Steinberg
Homological finiteness in one-relator monoids

12:15-14:00: Lunch break

14:00-14:45: Howard Straubing
Low-depth circuit complexity and finite (semi)groups

14:45-15:15: Moses Ganardi
Knapsack over wreath products

15:15-16:00: Coffee break

16:00-16:30: Albert Garreta-Fontelles
Equations in solvable groups

16:30-17:00: Geraud Senizergues
On the automorphisms group of a context-free graph

17:00-17:45: Artur Jez
Satisfiability of word equations is context-sensitive

Friday, 29.3.2019

9:00-9:45: Susan Hermiller
Automaticity for graphs of groups, and applications

9:45-10:15: Ilya Kapovich
Generic-case complexity of Whitehead's algorithm, revisited

10:15-10:45: Coffee break

10:45-12:00: final discussion