# Graph Modification Problems Dagstuhl seminar 14071

## **Current Program**

#### MONDAY

**09:00:** Welcome and presentation of participants

**09:15 - 10:15:** Marcin Pilipczuk and Michał Pilipczuk: Subexponential parameterized complexity of completion problems, parts I and II

10:15: Coffee break

**10:45 - 11:05:** Marcin Pilipczuk: Subexponential parameterized complexity of completion problems, part III

11:05 - 11:40: Martin Milanic: Vector Connectivity in graphs

11:40 - 12:15: Yixin Cao: Linear recognition of almost (unit) interval graphs

**12:15:** Lunch

**15:30:** Coffee and cakes

**17:00 - 18:00:** Open problems session

18:00: Dinner

## **TUESDAY**

09:00: Organizers' announcements / voting on the social program of Wednesday
09:15 - 10:00: Paul Medvedev: An introduction to genome assembly and its relation to problems on graphs

10:00: Coffee break

**10:30 - 11:05:** Mamadou Kanté: Enumeration of minimal dominating sets in graph classes

11:05 - 11:40: Dimitrios Thilikos: Optimal Erdős-Pósa for pumpkins revisited

11:40 - 12:15: Tinaz Ekim: Convexity in graphs

12:15: Lunch

15:30: Coffee and cakes

17:00 - 17:30: Isolde Adler: A few things about linear rankwidth

17:30 - 18:00: Open problems session contd.

**18:00**: Dinner

#### **WEDNESDAY**

**09:00:** Organizers' announcements / information on social program

09:15 - 10:00: Kristina Vuskovic: Weighted Independent Set in bull-free graphs

10:00: Coffee break

**10:30 - 11:05:** Martin Golumbic: Characterizations of cographs as intersection graphs of paths on a grid

11:05 - 11:40: Petr Golovach: Editing a connected graph of given degrees

11:40 - 12:15: André Nichterlein: The Complexity of Degree Anonymization in Graphs

Group photo 12:15: Lunch

Social program

## **THURSDAY**

**09:10:** Organizers' announcements

**09:15 - 10:00:** Andreas Brandstädt: Clique separator decomposition for a subclass of hole-free graphs

10:00: Coffee break

**10:30 - 11:05:** Bart Jansen: Near-optimal planarization **11:05 - 11:40:** Haiko Müller: Certifying FPT-algorithms

11:40 - 12:15: Archontia Giannopoulou: Polynomial kernel for Tree Deletion Set

12:15: Lunch

15:30: Coffee and cakes

17:00 - 1800: Open problems / discussion session

18:00: Dinner

#### **FRIDAY**

**09:00:** Closing comments / farewell

**09:05 - 09:40:** Erik Jan van Leeuwen: TBA

**09:40 - 10:15:** Neeldhara Misra: Max q-Colorable Induced Subgraph Problem on

Perfect Graphs

10:15: Coffee break

**10:45 - 11:15:** George Mertzios: On the Recognition of Four-Directional Orthogonal Ray Graphs

11:15 - 11:45: Rémy Belmonte: Edge contraction problems with degree constraints 11:45 - 12:15: O-juong Kwon: The hierarchy of subclasses of graphs having tree-

width at most two

**12:15:** Lunch

### **Departure**