

Abstract

Oberwolfach Workshop:

Combinatorial Optimization

Dates:

7 Nov - 13 Nov 2021 (Code: 2145)

Organizers:

Karen Aardal, Delft
Satoru Iwata, Tokyo
Volker Kaibel, Magdeburg
Ola Svensson, Lausanne

Combinatorial Optimization deals with optimization problems defined on combinatorial structures such as graphs and networks. Motivated by diverse practical problem setups, the topic has developed into a rich mathematical discipline with many connections to other fields of Mathematics (such as, e.g., Combinatorics, Convex Optimization and Geometry, and Real Algebraic Geometry). It also has strong ties to Theoretical Computer Science and Operations Research. A series of Oberwolfach Workshops have been crucial for establishing and developing the field. With the workshop scheduled for 2021 we in particular intend to extend this fruitful development by fostering research on current “hot topics” such as counting in matroids, fast approximate algorithms, parameterized complexity of integer programming, discrepancy, and approximation algorithms for traveling salesman type problems.