

# Graph Minors and Structure Graph Theory

## Organizer(s):

Ken-ichi Kawarabayashi (National Institute of Informatics, Japan)

## Description:

In this session, we shall discuss recent progress on Graph Minors and Structure Graph Theory. Topics include graph minors and matroid minors, graph width, the disjoint paths problem and algorithmic applications.

## Titles and Speakers:

- *Structure theorem for the minimal counterexample to Hadwiger's Conjecture.*  
Ken-ichi Kawarabayashi (National Institute of Informatics, Japan),  
Bruce Reed (McGill University)
- *Circle graph obstructions under pivoting*  
Sang-il Oum (University of Waterloo), Jim Geelen (University of Waterloo)
- *Linear time algorithm for recognizing  $K_5$ -minors*  
Zhentao Li (University of Waterloo), Bruce Reed (Canadian Research Chair in Graph Theory, McGill University)
- *Graph minors in (nearly) linear time*  
Bruce Reed (Canadian Research Chair in Graph Theory, McGill University), Ken-ichi Kawarabayashi (National Institute of Informatics, Japan), Zhentao Li (University of Waterloo)
- *TBA*  
Neil Robertson (Ohio State University)