

Abstract

Oberwolfach Workshop:

**Matrix Estimation Meets Statistical Network Analysis:
Extracting low-dimensional structures in high dimension**

Dates:

17 June - 23 June 2018 (Code: 1825b)

Organizers:

Florentina Bunea, Ithaca
Angelika Rohde, Freiburg
Patrick Wolfe, London
Harrison Zhou, New Haven

The workshop is focused on bringing together researchers in mathematical statistics, discrete mathematics and computer science to understand new and important challenges at the intersection of high-dimensional matrix theory and statistical network analysis. Two important aims of the workshop are:

- (i) To identify the common ground of these overlapping areas, and use this commonality to build and analyze theoretically models that can serve both communities;
- (ii) To understand how to utilize computationally efficient algorithms across these areas.

We expect that successfully meeting our goals can have an important impact and change the way in which one currently analyzes complex data sets that have matricial or network structures.