Abstract

Oberwolfach Workshop:

Recent Developments in Dirichlet Form Theory and Related Fields

Dates:

15 - 20 September 2024 (Code: 2438)

Organizers:

Zhen-Qing Chen, Seattle Michael Röckner, Bielefeld Masayoshi Takeda, Osaka Anita Winter, Duisburg

Theory of Dirichlet forms is one of the main achievements in modern probability theory. It has numerous interactions with other areas of mathematics and sciences. The recent notable developments are its role in the study of Liouville Brownian motion, Gaussian free field, stochastic partial differential equations, stochastic analysis on metric measure spaces, and Markov processes in random environments.

The scientific goal of the proposed workshop is to bring together top experts in Dirichlet form theory, stochastic analysis and related fields, with the common theme of developing new foundational methods and their applications to specific areas of probability. We plan to stress gender and geographic diversity, and also to invite some of the most promising junior mathematicians.