

Abstract

Oberwolfach Workshop:

Subfactors and Applications

Dates:

27 October - 2 November 2019 (Code: 1944)

Organizers:

Dietmar Bisch, Nashville

Terry Gannon, Edmonton

Vaughan Jones, Nashville

Yasuyuki Kawahigashi, Tokyo

The theory of subfactors of von Neumann factors, founded by Fields Medalist Vaughan Jones, is an exciting and extremely active area of mathematics that has profound connections with low dimensional topology, group theory, conformal field theory, statistical mechanics, quantum information theory and many others. At the heart of these interactions lies a surprising world of quantum symmetries that subfactors seem particularly suitable at capturing. New links between subfactor theory and quantum computing have recently been established as well.

The workshop aims at bringing together experts from these different areas to learn from each other, discuss problems and present new ideas at the frontier of these exciting developments.