

Boğaziçi MATH COLLOQUIUM

Exotic Structures in 4-dimensional Topology

Gordana Matic
University of Georgia

Abstract:

Ever since the breakthroughs due to the work of Freedman on topological and Donaldson on smooth 4-manifolds in the early 1980s, it became clear how different the dimension 4 is from any other dimension. The combination of these two breakthroughs produced examples of differing (exotic) smooth structures not only on closed topological 4-manifolds, but also on \mathbb{R}^4 . I will discuss some methods to construct and prove exoticness, some open questions, and some recent (and not so recent) results.

Date : Wednesday, March 12, 2025

Time: 13:30

Place: TB 130, Boğaziçi University