Rank conditions for finite group actions on 4-manifolds

Semra Pamuk

Middle East Technical University

Abstract: In this talk, I will give some old and new information about the existence of finite group actions on closed, connected, orientable 4-manifolds. In this dimension, the comparison between smooth and topological group actions are interesting but our focus will be on locally linear topological actions. In particular, we will talk about the following question: Given a closed orientable 4-manifold M, what is the maximum value of $\mathrm{rk}(G)$ over all the finite groups G which act effectively, locally linearly, and homologically trivially on M? This is a joint work with Ian Hambleton.

Date: Mar 12, 2021; Friday

Time: 16:00

Place: Zoom.