PLENARY TALK BY URI BADER, IMU 2022

Arithmetic Groups Cohomology and Higher Property T

Abstract:

Arithmetic groups, such as $SL_n(Z)$, are central objects in modern mathematics. The geometric approach of studying them via locally symmetric spaces leads naturally to consider their (co)homology theory. Indeed, their group cohomology carries valuable information. While we have a conjectural picture of its behavior, at the moment this theory is not well understood. In this talk I will introduce the subject and mention some old and new theorems. I will pay special attention to some vanishing results that extend Kazhdan's property T to higher degrees.

Based on a joint work with Roman Sauer.