

# Higher Property T, Banach Representations and Applications

*mercredi 10 septembre 2025 10:50 (1 heure)*

Gromov conjectured that the  $L^p$ -cohomology of simple groups vanishes below the rank.

Farb conjectured a fixed point property for actions of lattices in such groups on CAT(0) cell complexes of dimension lower than the rank.

Both conjectures follow from a new cohomological vanishing result, which could be seen as a Banach version of higher property T.

In my talk I will survey the subject and explain the new contribution.

Based on a joint work with Saar Bader, Shaked Bader and Roman Sauer.

**Orateur:** BADER, Uri (Weizmann Inst. & Univ. of Maryland)

**Classification de Session:** Morning Chair: Martin Orr