Bern-Fribourg Graduate Seminar

a seminar for Master and PhD students

Thursday 11th December, 2025: 16:15 - 16:45 Room B6, Exakte Wissenschaften, Bern

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Property (T) and Infinite Dimensional Geometry

Abstract

Property (T) was introduced by David Kazhdan in 1967 to study the geometry of finite-dimensional locally symmetric spaces. His approach consisted in studying those spaces via the unitary representations of their isometry groups and of lattices in those groups. The 1977 classification by Ol'shanskii and Kirillov of the unitary representations of the groups $O(\infty)$, $U(\infty)$ and $\mathrm{Sp}(\infty)$ made it possible for Bekka, in 2004, to establish property (T) for these groups. This invites developing arguments to study the geometry of symmetric spaces in the infinite-dimensional setting.