Mathematics Colloquium

Nicolas Monod

(EPFL)

Geometry, groups and fixed points

In the infinite diversity of geometric spaces, some landscapes are very familiar and accessible: Euclidean spaces, hyperbolic geometry, tree-like objects. These and many more can be related to matrix groups by studying their symmetries.

Meanwhile, in abstract harmonic analysis, there is also a class of very accessible groups: those where some form of Fourier analysis is possible, for instance abelian groups.

We will discuss an analogy between these two topics; it relies on a fundamental fixed-point principle.

www.unige.ch/math/

FACULTÉ DES SCIENCES
SECTION DE MATHÉMATIQUES

UNIVERSITÉ
DE GENÈVE