

Commensurating actions and CAT(0) cube complexes

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A commensurating action of a group G is the data of a G -set X and a subset M of X which is commensurated, i.e. such that the symmetric difference $gM\Delta M$ is finite for all $g \in G$. The purpose of the minicourse is an introduction to commensurating actions, its connection with median graphs and CAT(0) cube complexes. We will also emphasize Property FW, which is a weak form of Kazhdan's Property T: a group G has Property FW if every commensurating action (X, M) of G is transfixing, in the sense that there exists some G -invariant subset $M' \subset X$ with $M\Delta M'$ finite.

The material of the minicourse will be based on the survey (in progress)
<http://www.normalesup.org/~cornulier/fw.pdf>.