

APRIL 1 - JULY 15

IMPAN, WARSAW

SIMONS SEMESTER

COLLOQUIUM
TUESDAY, 02.07.2019
16:15-17:30

ROOM 106
IMPAN

GEOMETRIC AND ANALYTIC GROUP THEORY

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Gromov-hyperbolicity and beyond

Abstract: The notion of Gromov-hyperbolic group is crucial in geometric group theory, and the rich theory it generated has spectacular applications also to other fields, such as low-dimensional topology. However, many groups of interest in geometry and topology are not Gromov-hyperbolic, despite the fact that they display "hyperbolic-like" behaviour; this is notably the case for mapping class groups of surfaces, for example. Hence, a lot of research has been devoted to finding suitable generalisations of Gromov-hyperbolicity that encompass as many as possible of the motivating examples. I will discuss one such generalisation, namely hierarchical hyperbolicity, and its applications to concrete examples.

