

APRIL 1 - JULY 15

IMPAN, WARSAW

SIMONS SEMESTER

GEOMETRIC AND ANALYTIC GROUP THEORY

COLLOQUIUM
TUESDAY, 11.06.2019
16:15-17:30

ROOM 3180, MIMUW
BANACHA 2
02-097 WARSZAWA

Łukasz Grabowski (Lancaster University)

Approximation of groups with respect to the rank metric

Abstract: I'll talk about an ongoing joint work with Gabor Elek about approximation of groups with respect to the rank metric. The basic question is the following variant of the Halmos problem about commuting matrices: if A and B are large matrices such that the rank of the image of the commutator is small, is it true that A and B can be perturbed with small rank matrices in such a way that the resulting matrices commute? There are interesting connections to classical notions of commutative algebra, in particular we develop what are perhaps some new (or forgotten) variants of Nullstellensatz for primary ideals.

