

The profinite topology on groups

PAVEL ZALESSKII

Abstract

We shall start with a discussion of residual properties of groups and their interpretation in connection with the profinite completion. According to J-P. Serre a group G is *good* if the cohomology groups of G and its profinite completion \widehat{G} are naturally isomorphic on finite coefficients. The talk will be about residual properties, goodness, and the congruence kernel for arithmetic groups and groups of geometric nature.