

On coverings of word values in profinite groups

Eloisa Detomi
Università degli Studi di Padova,
Dipartimento di Matematica, Italy
detomi@math.unipd.it

Let w be a group-word. Suppose that the set of all w -values in a profinite group G is contained in a union of countably many subgroups. It is natural to expect that the properties of the covering subgroups have an influence on the structure of the subgroup $w(G)$ generated by the w -values. I will discuss some recent results and some work in progress concerning the case where w is a multilinear commutator word and the covering subgroups are nilpotent, pronilpotent or locally nilpotent.