Nikolay Nikolov: Verbal width in infinite groups

Starting with the work of Philip Hall from the 1940s there has been steady progress in the study of verbal width of infinite groups.

In this mini-course I will survey the classic results of Hall, Rhemtulla, Stroud and Romankov before specialising to profinite groups. After discussing the work of Jaikin-Zapirain which provides satisfactory answers in the case of pro-p groups I will present our current understanding of verbal width in general profinite groups.