

**Abstract:**

Verbal subgroup of a group  $G$  is a subgroup that is defined by some word, i.e. it is generated by values of this word on  $G$ . In particular, if a word is the commutator  $[x, y] = x^{-1}y^{-1}xy$ , the verbal subgroup is the commutator subgroup  $G'$  of  $G$ . Sometimes  $G'$  is the set of all commutators (in this case we say that the commutator width is equal to 1), in other cases there is a minimal number  $m$  such that any element from  $G'$  is the product of no more than  $m$  commutators (in this case we say that the commutator width is equal to  $m$ ), if there is no such number  $m$ , then we say that the commutator width is infinite. The verbal width is defined analogously.

In this talk we'll discuss some results and open problems in finite groups, in linear groups over fields and rings, and in braid and Artin groups.