

**Title:** Minimally transitive groups and a conjecture of Pyber

**Abstract:** Suppose that  $G$  is a transitive permutation group, of degree  $n$ , but that  $G$  needs a large number of generators (in terms of  $n$ ). If possible, we would like to “reduce” the number of generators, whilst keeping our group transitive. More precisely, we would like to take a subset  $X$  of  $G$ , minimal with the property that  $\langle X \rangle$  is transitive. The question is: can we find a good upper bound for  $|X|$ , in terms of  $n$ ? In this talk, we discuss the history of this question, including a conjecture of Pyber, and some new results.

We will also speak briefly about a generalisation of the minimal generation problem for finite groups, which has started to attract some recent work.