## Logic Seminar

## Left-orders of low computational complexity Hang Lu Su (ICMAT, Madrid)

**Abstract:** Left-orderable groups are groups which admit a strict total order  $\prec$  which is invariant under left-multiplication, called left-order. I will explain our approach to the problem of algorithmically determining whether  $g \prec h$  using the framework of formal languages, and attempt to give an intuitive justification to the arbitrary choices made in formalising our study of this problem. Finally, I will give an overview of our results concerning left-orders of low computational complexity. Some of these results are joint work with Yago Antolín and Cristóbal Rivas.

Tuesday, April 20 at 11:00 AM in Zoom