

Interval Garside Theory and the $K(\pi,1)$ conjecture for Artin-Tits groups

Georges Neaime

Ruhr-Universität Bochum

Interval Garside theory describes fundamental properties of Artin-Tits groups that derive from intervals in Coxeter groups. In this talk, I will describe the intervals of quasi-Coxeter elements and their interval groups. In the particular case of Coxeter elements, I will also describe how these intervals play an important role towards the proof of the $K(\pi,1)$ conjecture for Artin-Tits groups. A part of this work is in collaboration with Barbara Baumeister, Derek Holt, and Sarah Rees.