

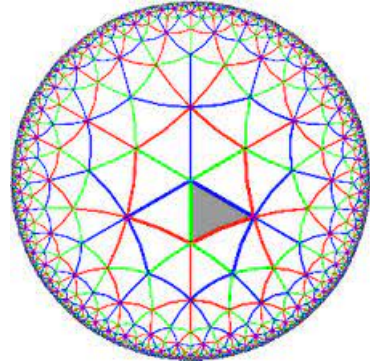
## Oberseminar Geometrie

Department of Mathematics

University of Fribourg

Physics 2.52

Wednesday November 9, 2022, 10:20



NAOMI BREDON (UNIFR)

### Coxeter systems, growth rates and Perron numbers

In this talk we study abstract Coxeter systems  $(\Gamma, S)$  whose spherical subgroups have rank 2 at most. We prove that if the Euler characteristic of the presentation diagram of  $(\Gamma, S)$  is zero (resp. positive), then the growth rate is a Salem number (resp. a Pisot number). In this way, we extend Parry's and Floyd's results for cofinite hyperbolic Coxeter groups. In the negative Euler characteristic case, we provide infinitely many Coxeter systems whose growth rates are Perron numbers. This is a joint work with Tomoshige Yukita.