

1103-20-201

Christophe Hohlweg* (hohlweg.christophe@uqam.ca), CP8888 succ. Centre Ville, Montréal, Québec H3C3P0, Canada. *Small roots and inversion sets in Coxeter groups.*

Small roots are the main ingredient introduced by Brink and Howlett in order to prove that the language of reduced words in a Coxeter group W is regular. From small roots we obtain via inversion sets a finite set of words called the "elementary elements" in W . In this talk I will discuss the (sometimes conjectural) links of these elements with the canonical automaton for W and the braid group associated to W . This talk is based on a work in progress with P. Dehornoy and M. Dyer. (Received August 20, 2014)