

1070-05-244

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*The cyclically fully commutative elements in a Coxeter group.* Preliminary report.

In this talk, we will introduce the cyclically fully commutative (CFC) elements in a Coxeter group. Roughly speaking, these are the elements whose reduced expressions when written as cyclic words, avoid long braid relations. We will show how these are easily enumerated in any Coxeter group, and discuss some interesting combinatorial problems. In particular, we are looking at how to describe the CFC elements via generalized pattern avoidance, and as subsets of non-crossing and/or non-nesting partitions. Finally, we will discuss preliminary findings on enumerating the CFC affine permutations by length. (Received February 13, 2011)