



Speaker: Weijia Wang
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Monday, November 17, 2014
4:00 PM
129 Hayes-Healy Hall

Title: A Finite State Automaton For Coxeter Groups

Abstract:

The problems of determining when two words represent the same element in the group and finding a finite state automaton that recognizes the language of reduced words are fundamental ones in the combinatorial group theory. Using the standard geometric representation and the theory of root system, I will show that both problems can be solved for Coxeter groups. In particular I will show how to construct such an automaton using a partial order structure on the set of roots.