1158-05-153 **Richard M. Green*** (rmg@colorado.edu), Department of Mathematics, University of Colorado Boulder, Campus Box 395, Boulder, CO 80309-0395. *Reduced words arising from convex subheaps.*

A heap is a certain type of partially ordered set whose elements are labeled by the vertices of a graph. A finite heap over a Coxeter graph gives rise to an expression for an element of the associated Coxeter group, by refining the partial order to a total order and reading the labels in order. This associates a heap to every reduced expression, giving a bijection between reduced expressions (up to commutation) and their heaps (up to isomorphism). This talk will study the set of Coxeter group elements that can be obtained from the finite convex subheaps of a fixed infinite heap. For certain choices of infinite heaps, the reduced words arising from convex subheaps have interesting points of contact with representation theory. (Received February 28, 2020)