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Zachary Strider McGregor-Dorsey* (mcgregoz@colorado.edu). *Full Heaps and Minuscule Posets.*

A heap is a kind of poset with each element assigned a label taken from the vertices of an underlying graph and with each relation subject to certain restrictions derived from the edges of the underlying graph. J. Stembridge showed that the minuscule elements of a Weyl group are in correspondence with the set of heaps over the group's Dynkin diagram, subject to certain restrictions. For finite Weyl groups, the 'largest' of these heaps are minuscule posets. For affine Weyl groups, no such 'largest' heap can exist because the groups are infinite. However, R. Green has developed the theory of full heaps, which are poset constructions similar to minuscule posets, albeit infinite. This presentation will discuss several properties full heaps and minuscule posets share and other aspects in which they differ. (Received February 10, 2011)