1073-05-110   **Nathan Reading*** (`nathan_reading@ncsu.edu`) and **David E Speyer**. *Cambrian models for cluster algebras.*

Cluster algebras are certain commutative rings generated by a collection of rational functions called *cluster variables.* The cluster variables are determined recursively from a small amount of initial combinatorial data. We will show how combinatorial models of cluster algebras (of finite and affine type) arise from the combinatorics of Coxeter groups, and specifically, sortable elements and Cambrian lattices. (Received July 29, 2011)