Alexander Garver* (alexander.garver@gmail.com) and Thomas McConville (thomasmc@mit.edu). Noncrossing Tree Partitions.

We introduce noncrossing tree partitions, which generalize the classical noncrossing set partitions. As in the classical case, they form a lattice whose partial order is given by refinement, and there is a Kreweras complement on noncrossing tree partitions. We will explain how noncrossing tree partitions provide a new classification of the c-matrices of a type A cluster algebra. This is joint work with Thomas McConville. (Received July 18, 2016)