## 1120-16-190 Alexander Garver\* (alexander.garver@gmail.com), School of Mathematics, 206 Church Street SE, Minneapolis, MN 55455, and Thomas McConville. Noncrossing Tree Partitions and Tiling Algebras.

We introduce noncrossing tree partitions which are certain noncrossing collections of curves on a tree embedded in a disk. These generalize the classical type A noncrossing partitions, and, as in the classical case, they form a lattice whose partial order is given by refinement. The data of a tree embedded in disk also defines a finite dimensional algebra called a *tiling algebra* by Coelho Simões and Parsons. Examples of such algebras are type A Jacobian algebras and type A *m*-cluster-tilted algebras, which arise in the context of cluster algebras. Simple-minded collections for finite dimensional algebras are important representation theoretic objects. For example, such objects have been used to construct derived equivalences for symmetric algebras by Rickard. Our main result is a combinatorial classification of 2-term simple-minded collections for tiling algebras in terms of noncrossing tree partitions. This is joint work with Thomas McConville. (Received February 21, 2016)