## 1135-37-2542 **Debra Mimbs\*** (dmimbs@leeuniversity.edu), 761 Abby Glen Drive NE, Cleveland, TN 37312. Circle Maps Dynamics and Their Relationship to Julia Sets.

In order to study the Julia set of a given function, one may study the corresponding (Thurston) invariant lamination, i.e. a collection of chords of the unit circle S (called leaves) that are pairwise disjoint inside the open unit disk and satisfy a few dynamical properties. By generating an equivalence relation with certain properties, one then arrives at a space that is topologically equivalent to a Julia set. Therefore, the dynamics of maps on the unit circle directly yield information about the dynamics within the Julia set itself. Certain dynamical properties and interesting open questions that may yield themselves nicely to an undergraduate audience will be introduced. (Received September 26, 2017)