1099-37-211   **Charles Christopher Johnson*** (`ccjohns@clemson.edu`), SC , and **Martin Schmoll**.
Eigenfoliations of half-translation tori and their universal covers.

Universal covers of half-translation tori, called Panov planes, admit interesting directional dynamics. In particular, the eigendirections of an affine pseudo-Anosov diffeomorphism on the torus give rise to directions on the Panov plane whose foliations are either minimal or confined to an infinite strip. Furthermore, these two cases can be distinguished by the original pseudo-Anosov's action in the torus' first homology group.

   In this talk we will present results relating to eigendirection dynamics on Panov planes, and also describe how Panov planes are related to the periodic Ehrenfest wind-tree model. This relationship opens the door to making statements about billiards in the wind-tree by studying the corresponding Panov planes, a topic which is still in its infancy. (Received February 09, 2014)