

1107-57-411

William H. Kazez and **Rachel Roberts*** (roberts@wustl.edu). *Approximating taut foliations.*

Taut foliations, volume preserving flows, and tight contact structures are important topological structures on 3-manifolds. We will define these structures and describe some of the ways in which they are important. In particular, we will discuss these structures in the context of the following result of Eliashberg and Thurston: any smooth taut co-oriented foliation can be approximated by a pair of tight contact structures, one positive and one negative. I will discuss work, joint with Will Kazez, in which we show that the smoothness assumption on the foliation can be dropped; namely, any continuous co-oriented taut foliation can be approximated by a pair of tight contact structures, one positive and one negative. (Received January 19, 2015)