1109-37-136 **Zhiqiang Li***, lizhiqiangfly@gmail.com. *Ergodic theory of expanding Thurston maps.*

Thurston maps are a class of branched covering maps on the 2-sphere that arose in W. Thurston's characterization of postcritically finite rational maps. By imposing a natural expansion condition, M. Bonk and D. Meyer investigated a subclass of Thurston maps known as expanding Thurston maps, which turned out to enjoy nice topological, metric, and dynamical properties.

This talk will be a brief summary of known results and new developments on the ergodic theory for expanding Thurston maps. We will first introduce expanding Thurston maps with some motivation from their connection to other topics of mathematics. We will then discuss measures of maximal entropy, and equilibrium states for such maps. Equidistribution results of periodic points and preimages will also be discussed.

If time permits, we will also mention some results on the weak expansion properties of expanding Thurston maps, which are closely related to the existence of the measures mentioned above. (Received January 28, 2015)