1154-37-1604 **Lien-Yung Kao*** (lkao@uchicago.edu), The University of Chicago, Department of Mathematics, Chicago, IL 60637. *Pressure metrics for Teichmüller spaces of punctured surfaces.*

Thurston pointed out that one can use variations of lengths of closed geodesics on hyperbolic surfaces to construct a Riemannian metric on the Teichmüller space. For closed surfaces cases, Wolpert proved this Riemannian metric is indeed the Weil-Petersson metric. McMullen proposed a thermodynamic formalism approach to this Riemannian metric and called it the pressure metric. In this talk, I will discuss how to extend this dynamics construction to non-compact finite area hyperbolic surfaces. If time permitted, I will also discuss relations between the pressure metric and Manhattan curves. (Received September 16, 2019)