Math Postdoc Seminar: Yongquan Zhang

Wednesday, October 5·1:00 − 2:00pm

Title: The pressure metric on quasifuchsian space

Abstract: A quasifuchsian space is the quasiconformal deformation space of a Fuchsian group in PSL(2,C). Each point can be represented by a (marked) quasifuchsian manifold. It contains the Teichmüller space as a complex submanifold. In this talk, I will discuss the basics of quasifuchsian space, and introduce a Riemannian metric on this space called the pressure metric, which restricts to the Weil-Petersson metric on Teichmüller space. Very little is known about the global geometry of this metric, and I will mention a few open questions about its geometry if time permits.