BOSTON UNIVERSITY GEOMETRY AND PHYSICS SEMINAR

COUNTING GEODESICS ON FLAT SURFACES

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CCDS 365, Oct 4, 2023, 4-5pm

Tea: 3:45pm in Room 365

Abstract: A holomorphic differential induces a flat metric with saddle points such that the underlying Riemann surface can be realized as a polygon whose edges are pairwise identified by translation. Varying such flat surfaces by affine transformations induces an action on moduli spaces of differentials, called Teichmueller dynamics. Generic flat surfaces in an orbit closure of Teichmueller dynamics possess similar properties from the viewpoint of counting geodesics of bounded lengths, whose asymptotic growth rates satisfy a formula of Siegel–Veech type. In this talk I will give an introduction to this topic and discuss some recent results about computing Siegel–Veech constants via intersection theory on moduli spaces.

See `http://math.bu.edu/research/geom/seminar.html` or contact Yu-Shen Lin (*yslin@bu.edu*) or Brian Williams (*bwill22@bu.edu*) for more information.