Heidi Goodson\* (heidi.goodson@brooklyn.cuny.edu). Sato-Tate Distributions of Jacobian Varieties.

Let C be a smooth projective curve defined over  $\mathbb{Q}$ . We would like to study the limiting distributions of the coefficients of the normalized L-polynomial for C. To determine the distributions, we study the Sato-Tate groups of the Jacobians of the curves. In this talk we give both general results and explicit examples of Sato-Tate groups for certain curves C. We will use these groups to determine the limiting distributions of the coefficients of the normalized L-polynomial. (Received September 15, 2020)