

**Speaker:** Katherine Woo

**Title:** Manin's conjecture for Châtelet surfaces

**Abstract:** Manin's conjecture predicts the number of rational points of bounded height on sufficiently nice surfaces. We resolve Manin's conjecture for all Châtelet surfaces over  $\mathbb{Q}$ . The key analytic ingredient is estimating sums of Fourier coefficients of modular forms along polynomial values.