

**Speaker:** Paul Gunnells

**Title:** Modular symbols over function fields

**Abstract:** Modular symbols, due to Birch and Manin, provide a very concrete way to compute with classical holomorphic modular forms. Later modular symbols were extended to  $GL(n)$  by Ash and Rudolph, and since then such symbols and variations have played a central role in computational investigation of the cohomology of arithmetic groups over number fields, and in particular in explicitly computing the Hecke action on cohomology.

A theory of modular symbols for  $GL(2)$  over the rational function field was developed by Teitelbaum and later applied by Armana. In this talk we extend this construction to  $GL(n)$  and show how it can be used to compute Hecke operators on cohomology. This is joint work with Dan Yasaki.