



Contribution ID: 34

Type: **not specified**

## **Romyar SHARIFI. Eisenstein cocycles in motivic cohomology.**

*Friday, June 28, 2019 9:00 AM (1 hour)*

Abstract: I will describe joint work with Akshay Venkatesh on the construction of a 1-cocycle on  $GL_2(\mathbb{Z})$  valued in a quotient of a limit of second motivic cohomology groups of open subschemes of the square of  $G_m$  over  $\mathbb{Q}$ . I'll show how the cohomology class of this cocycle is annihilated by an Eisenstein ideal, and I'll explain how the cocycle specializes to homomorphisms from first homology groups of modular curves to second K-groups of rings of cyclotomic integers. I also hope to mention a related construction over imaginary quadratic fields.