

Number Theory Seminar

Modular units, Selberg q -difference equations, and the cuspidal divisor class group

DR. AMANDA FOLSOM

(MPI Bonn)

ABSTRACT: In this talk I will discuss a particular family of modular units constructed using functional solutions to q -difference equations found in the work of Selberg. Arising in this way, these objects are of interest for various analytic properties. Dually, we exhibit fundamental algebraic roles played by these modular units, including those within the cuspidal divisor class group, the modular function fields, the modular unit groups, class field theory, and cyclotomic theory.

Date: Friday, 15.12.2006 at 14.15pm

Place: HWZ (HG G43)

G. Wüstholz