

# MICHLER LECTURE

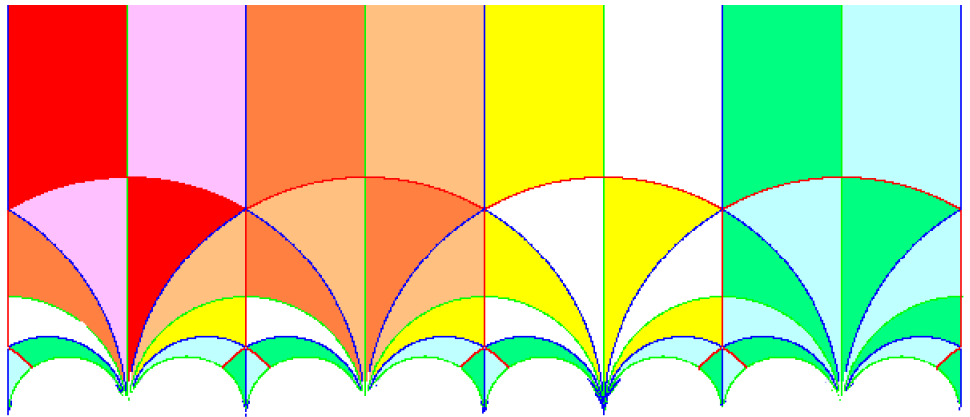
*A special Oliver Club offered in memory of Ruth Michler*

**Ling Long**, Iowa State and Cornell University

## ***Atkin and Swinnerton-Dyer Congruences***

*Modular forms are nice periodic functions defined on the upper half complex plane whose symmetries can be described by finite index subgroups of the modular group  $SL(2, \mathbb{Z})$ .*

*The Fourier coefficients of modular forms satisfy some remarkable congruences called Atkin and Swinnerton-Dyer (ASD) congruences, which are  $p$ -adic generalizations of the Hecke recursions, and are often referred to as supercongruences in some literature. Typical examples of supercongruences involve sequences such as multinomial coefficients. In this talk, we will give a basic introduction to Atkin and Swinnerton-Dyer congruences, and discuss some recent progress and open questions.*



**Thursday, October 4, 2012**  
**at 4:00 PM in 532 Malott Hall**

Refreshments will be served at 3:15 PM in the Mathematics Department lounge (532 Malott Hall).