"In winter the early mornings. It is beautiful indeed when snow has fallen during the night, but splendid too when the ground is white with frost."

The Pillow Book of Sei Shonagon (trans. Ivan Morris)

The Trivial Notions Seminar
Proudly Announces

Equidistribution of Gauss sums over finite fields

A talk by
Koji Shimizu

Abstract

For a given finite field, we consider the sum over its non-zero elements of the product of an additive character and a multiplicative character of the field. This kind of sum is called a Gauss sum over a finite field and we can easily show that its absolute value is the square-root of the cardinality of the finite field if the characters are non-trivial. Hence we have the following natural question: how do the arguments of these sums vary as we vary the multiplicative character? We discuss this problem using basic techniques in arithmetic geometry over finite fields.

Wednesday February 18$^{\text{th}}$, at 1:00 pm
Science Center 112