- Mark Kisin

The Trivial Notions Seminar Proudly Announces

Artin's Primitive Root Conjecture

A talk by Ananth Shankar

Abstract

Given a prime p, we know that there exist integers whose order mod p equals p - 1, i.e. the group $\mathbb{Z}/p\mathbb{Z}^*$ is cyclic. Artin's primitive root conjecture deals with the opposite question in some sense. Namely given an integer a, do there exist infinitely many primes p such that a is a primitive root mod p? We will sketch a proof that there exist integers which are primitive roots for infinitely many primes, and if time permits, discuss analogues of Artin's conjecture in more general situations.

Wednesday March 5th, at 2:00 pm Science Center 507