

THE TRIVIAL NOTIONS SEMINAR

Sasha Petrov

will speak on

An application of algebraic geometry to homotopy groups of spheres

ABSTRACT

The images of J-homomorphism are cyclic subgroups of the stable homotopy groups of spheres, defined by a simple geometric construction. It was conjectured by Adams that, in some degrees, the orders of these cyclic groups are denominators of the corresponding Bernoulli numbers. Surprisingly, the crucial step in the proof of the conjecture, given by Quillen, uses the theory of étale homotopy type to produce certain maps between classifying spaces out of the Frobenius endomorphism in positive characteristic.

Thursday, December 2, 2021

at 11:30 am

Science Center, Room 232