



PURDUE UNIVERSITY

Department of Mathematics Special Colloquium

Speaker: Dr. Sergey Lysenko, University of Paris 6
Title: "Geometric Aspects of the Langlands Program"
Date: Thursday, February 15, 2007
Time: 4:30 P.M.
Place: BRNG B242

Abstract

The classical Langlands correspondence relates representations of a reductive group G over a local field F (resp., over adelic points of a global field F) and representations of the Galois group of F . This correspondence is expected to be motivic in nature (it has its reincarnations in different cohomology theories).

We will present some simple examples of passage from functions to sheaves (Gorthendieck function–sheaves dictionary), which motivate the geometrization of the classical theory of automorphic forms. We will briefly review some achievements in the geometric Langlands program.