

Mathematics Colloquium

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**Geometric Aspects
of the Langlands Program**

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 (Grothendieck function-sheaves dictionary), which motivates the geometrization of the classical theory of automorphic forms. We will briefly review the major achievements in the geometric Langlands program.

Wednesday, February 7

**4:00-5:00 pm
204 Smith Hall**