

Meeting: 1005, Newark, Delaware, SS 9A, Special Session on Arithmetic Groups and Related Topics

1005-11-26 **Avner Ash*** (ashav@bc.edu), Dept. of Mathematics, Boston College, Chestnut Hill, MA 02467.
p-adic deformation of automorphic cohomology. Preliminary report.

The algebraic functions on the big cell afford a common source for the finite dimensional rational representations of a reductive group. In order to construct a theory of p -adic deformations of the cohomology of an arithmetic group, Glenn Stevens and I have “thickened” this space of functions, or rather its dual space, into a large module of p -adic valued measures that can be studied using p -adic analysis. I will explain this space and how it can be used to formulate a “control theorem” for the cohomology. (Received January 12, 2005)