NUMBER THEORY SEMINAR

Automorphy and the Sato-Tate conjecture

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<u>WHEN</u>: Thu 27 Sep 2012, 10:00 a.m.

<u>WHERE</u>: Chase 227

<u>ABSTRACT</u>:

The Sato-Tate conjecture for modular forms was proved recently using the formidable tools of Galois representations and automorphic L-functions. However, Langlands conjecture that the symmetric power L-functions attached to the conjecture should be automorphic has not yet been proved. We will show how a super special case of the Langlands functoriality conjecture along with some ideas of Ramanujan will imply this automorphy. Once this is in place, one can derive error terms in the Sato-Tate conjecture/theorem. This is joint work with Kumar Murty.

There will also be a Colloquium talk in the afternoon at 2:30 PM:

Speaker: Ram Murty - Queen's University
Title: The partition function revisited

Any questions, please e-mail: rnoble@mathstat.dal.ca.