Department of Mathematics and Statistics Colloquium

Explicitly computing spaces of paramodular forms

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Abstract: We describe how to rigorously compute spaces of paramodular cusp forms. Our method relies on determining upper bounds on the number of Fourier Jacobi coefficients needed to determine a weight k paramodular cusp form of level N that is an eigenform under all paramodular Atkin-Lehner involutions. This method is appealing because it works for general levels N and also for weight 2, a weight inaccessible to trace formulas. As a consequence, we verify the Paramodular Conjecture, a degree two analogue of the Taniyama-Shimura conjecture, in many cases of low level. This is joint work with Cris Poor and David Yuen.

Monday, February 16 at 3:45 in Roop 103

refreshments at 3:30