General Society Meeting & Hardy Lecture 2016

Friday 8 July 2016
JZ Young Lecture Theatre, UCL, Gower Street London
(Nearest Tube: Euston, Euston Square, Warren Street)

3.30   Opening of the meeting and LMS business, including the announcement of the
        2016 Prize winners (open to all)
        Tony Scholl (Cambridge)
        TITLE TBA

4.45   Tea/Coffee

5.15   Jacob Lurie (Harvard) — Hardy Lecture
        Weil's Conjecture for Function Fields

Abstract: *Let q be a positive definite quadratic form with integer coefficients. We say that another such quadratic form q' is in the genus of q if, for every positive integer n, the quadratic forms q and q' differ by a change of variable when reduced modulo n. Up to a change of variables, there are only finitely many quadratic forms in a genus. Moreover, there is a formula (the "mass formula" of Smith-Minkowski-Siegel) which counts the number of quadratic forms within a genus. This mass formula was reformulated by Tamagawa and Weil as a statement about the volume of certain adelic homogeneous spaces for the special orthogonal group SO(n). This led Weil to conjecture an analogous statement for the volumes of homogeneous spaces for other groups, which he verified in a number of cases and has subsequently been proven by Langlands, Lai, and Kottwitz. In this lecture I'll describe joint work with Dennis Gaitsgory which establishes the function field analogue of Weil's conjecture, using techniques inspired by algebraic topology*

6.30   Reception at De Morgan House
7.30   Society Dinner to be held at VENUE TBC

These lectures are aimed at a general mathematical audience. All interested, whether LMS members or not, are most welcome to attend this event. To register for your place at the meeting, please email Elizabeth Fisher (lmsmeetings@lms.ac.uk). If you would like to attend the Society Dinner, please email Elizabeth Fisher (lmsmeetings@ lms.ac.uk). The cost to attend the Society Dinner is £35.00 per person (inclusive of wine).

1865 - 2015