ANDREW FIORI, McGill University

Characterization of Special Points on Orthogonal Shimura Varieties

We shall discuss a characterization of the special fields associated to the special points on the Shimura varieties attached to orthogonal groups O_q coming from quadratic forms q of signature (2,n). Shimura reciprocity tells us that the values of modular forms at special points will always be contained in the Hilbert class field of a field closely related to the special field of the point. The characterization we give is obtained by way of a characterization of the algebraic tori $T \subset O_q$.