

Minimal modularity lifting theorems over imaginary quadratic fields

David Geraghty

We prove minimal $R = T$ theorems for $GL(2)$ over an imaginary quadratic field, assuming the existence of Galois representations associated to eigenclasses in the cohomology of the corresponding locally symmetric spaces. Our method also applies in principle to the case of weight 1 forms over \mathbb{Q} and certain other situations. This is work in progress with Frank Calegari.