

Towards an Eigencurve over imaginary quadratic fields

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Abstract

The usual construction of Eigenvarieties relies on the existence of associated Shimura varieties, which provide ample sources of Galois representations. For modular forms over an imaginary quadratic field this approach does not work. In *joint work with Barry Mazur* we propose a conjectural construction of an Eigencurve that will parameterize certain two dimensional continuous p -adic Galois representations over an imaginary quadratic field K . Perhaps surprisingly, this curve will not in general have the property that the classical points are Zariski dense.