

1145-11-495

Jan Vonk* (jan.vonk.jv@gmail.com), Mathematical Institute, University of Oxford, Woodstock Road, Oxford, Oxfordshir OX2 6GG, United Kingdom, and **Henri Darmon**. *Towards a p -adic theory of singular moduli for real quadratic fields.*

In recent work with Henri Darmon, the notion of a "Rigid meromorphic cocycle" was introduced, to provide an analogue for real quadratic fields of singular moduli, which occupy centre stage in CM theory. I will discuss recent progress towards proving certain aspects of the largely conjectural "RM theory" that results. (Received September 07, 2018)