

p -ADIC L -FUNCTIONS FOR $GL(2)$

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The use of modular symbols to attach p -adic L -functions to Hecke eigenforms goes back to the work of Manin *et al* in the 70s. In the 90s, Stevens proposed a new approach based on his theory of overconvergent modular symbols, which was successfully used to construct p -adic L -functions on the Eigenvariety. The first two lectures will present a selection of those results. In the third lecture we will introduce some special cycles on Hilbert modular varieties, while in the last lecture we will use the overconvergent cohomology of those varieties to attach p -adic L -functions to (families of) automorphic forms on $GL(2)$.

SELECTED REFERENCES

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- [3] M. DIMITROV, *Automorphic symbols, p -adic L -functions and ordinary cohomology of Hilbert modular varieties*, Amer. J. Math., 135 (2013), pp. 1–39.
- [4] B. MAZUR, J. TATE, AND J. TEITELBAUM, *On p -adic analogues of the conjectures of Birch and Swinnerton-Dyer*, Invent. Math., 84 (1986), pp. 1–48.
- [5] G. STEVENS, *Rigid analytic modular symbols*, preprint 1994.