The Equivariant Tamagawa Number Conjecture for modular motives with coefficients in Hecke algebra(s)

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111 Cummington Street, MCS B21
Tea and cookies in MCS 153 at 2:45 pm

Abstract: In 1979, Barry Mazur asked whether the special values of the L-functions of two eigencuspforms congruent modulo an ideal m of the Hecke algebra could be computed in terms of the action of the Hecke algebra on the m-torsion of the tale cohomology of the modular curve. The Equivariant Tamagawa Number Conjecture with coefficients in the Hecke algebra provides a subtle and powerful answer to this question. I will explain the motivation behind this conjecture, its statement and its proof under the hypotheses ensuring the existence of a Taylor-Wiles system.