ADDENDUM 1989

The theory developed in the first article of this volume is applied in [4] to give explicit relations between the periods of abelian varieties. In [10] it is applied to the study of the periods of the motives attached to Hecke characters.

The gap in the theory of Tannakian categories noted on p 160 (namely, the lack of a proof that two fibre functors are locally isomorphic for the fpqc topology) is filled in [5] (under the necessary assumption that $k = \text{End}^{\otimes}(1)$).

An extension of the Taniyama group is constructed in [1], and is applied to prove a relation between the critical values of certain Hecke L-functions and values of the classical gamma function.

The explicit rule of J. Tate mentioned on p263 is contained in an unpublished manuscript of Tate, whose contents can be found in §1 – §3 of Chapter VII of [6]. The last section of the same chapter (based on a letter from Deligne to Tate) gives a slightly different approach to the proof of the main theorem of article IV of this volume.

Langlands's conjecture (p311) is proved in complete generality in ([2], [3]) and in [7]. The theorem of Kazhdan on which these works are based has been given a simpler proof in [9]. The survey article [8] reviews some of the material in this volume, and explains how the Taniyama group (together with the period torsor) controls the rationality properties of holomorphic automorphic forms and other objects.

Blasius (unpublished) has proved results related to the conjectures in article VI.

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