

ERRATUM 1989

CONTENTS: The title of the third article is "Langlands's construction of the Taniyama group".

General Introduction: The authors considered it so well-known that Grothendieck was the originator of the theory of motives and the theory of Tannakian categories that they neglected to mention it; perhaps they should have.

p8₂: motivic Galois group

p15₄: This is not quite so transparent as the "and so" suggests.

p21⁸: $0 \rightarrow \mathcal{O}_X^s \rightarrow 0 \rightarrow \dots$

p27₁₁: ... and remain true, if ...

p28₂: $H^i(X)(d)$

p42³: from

p42¹²: The complex conjugate $\overline{\mu(\lambda)}$ of

$\mu(\lambda)$ satisfies $\overline{\mu(\lambda)} \cdot \nu^{p^q} = \bar{\lambda}^{-q} \cdot \nu^{p^q}$.

p43₉: It is more natural to let ν act as ν .

p45⁶: complex conjugation on $H_\sigma(\mathbb{C})$ corresponds to $\sigma \circ$ (complex conjugation) on $H(\mathbb{C})$.

p56₉: and an

p61⁹: to $\psi = \text{Tr}_{\mathbb{E}/\mathbb{Q}}(f\varphi)$.

p75²: There is no need to refer to Borel-Springer for the proof, since it is given in the remainder of the paragraph.

p80₃: When all $a_i = 0$, the dimension of $H^n(V, \mathbb{C})_{\mathbf{a}}$ is 1 only if n is even; otherwise it is zero.

p85₆: Replace F_q^{n+1} with F_q^{n+2} .

p85₅: Replace P^n with P^{n+1} .

p89³: $\sum a_i \equiv 0 \pmod{d}$.

p98¹⁵: Springer.

p101⁶: Replace 149 with 147.

p104³: $(X, Y) \mapsto X \otimes Y$.

p119¹: (\mathbb{C}, \otimes)

p124₉: indeterminate

p147₇: form

p148¹⁰: representable

p154₇: if and only if

p157⁵: $\text{Aut}^{\otimes}(\omega)$

p168₄: $1 \otimes a^{-1}$

p198₄: $H^{2r-s}(X)$

p199¹⁰: $\text{id}^{\otimes} *$

p216₈: [2.0.10]

p218₈: Kuga-Satake

p231¹¹: For any L Galois over Q,

p232⁷: $\lambda(\nu\sigma) + \lambda(\sigma)$

p232⁹: $\Lambda^L \subset \Lambda^F$ where $F = L \cap \mathbb{Q}^{\text{cm}}$

p232¹¹: $\Lambda^L \supset \Lambda^F$

p232₁: The diagram should be:

$$\begin{array}{ccccccc}
 & & & & F^x/F_0^x & \xrightarrow{\sim} & S^F/\text{hw}(\mathbb{Q}^x) \\
 & & & & \uparrow & & \uparrow \\
 1 \rightarrow \text{Ker} & \rightarrow & F^x & \rightarrow & S^F & \rightarrow & 1 \\
 & & \uparrow \approx & & \uparrow & & \uparrow \text{hw} \\
 1 \rightarrow \text{Ker} & \rightarrow & F_0^x & \xrightarrow{\text{norm}} & \mathbb{Q}^x & \rightarrow & 1
 \end{array}$$

p259¹: Delete the second b from the first diagram.

p264₁₄: $z \cdot p\bar{z}^{-q}$

p271²: K_S^*

p286₄: $\phi^0(\tau, \mu', \mu) \circ \phi_{\tau, \mu}^0 = \phi_{\tau, \mu'}^0$.

p331¹: Delete "Shimura Varieties V.7"

p343₄: being in $G^{\text{ad}}(\mathbb{R})^*$.

p381¹⁴: $\text{disco}(H_d)$