# 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.

p8$_2$: motivic Galois group

p15$_4$: This is not quite so transparent as the "and so" suggests.

p21$^8$: $0 \longrightarrow \mathcal{O}_X^x \longrightarrow 0 \longrightarrow \ldots$

p27$_{11}$: ... and remain true, if ...

p28$_2$: $H^i(X)(d)$

p42$^3$: from

p42$^{12}$: The complex conjugate $\overline{\mu(\lambda)}$ of $\mu(\lambda)$ satisfies $\overline{\mu(\lambda)} \cdot v^{pq} = \overline{\lambda}^{-q} \cdot v^{pq}$.

p43$_9$: It is more natural to let $\nu$ act as $\nu$.

p45$^6$: complex conjugation on $H_\sigma(\mathbb{C})$ corresponds to $\sigma\circ$(complex conjugation) on $H(\mathbb{C})$.

p56$_9$: and an

p61$^9$: to $\psi = \mathrm{Tr}_{E/\mathbb{Q}}(f\varphi)$.

p75$^2$: There is no need to refer to Borel-Springer for the proof, since it is given in the remainder of the paragraph.

p80$_3$: When all $a_i = 0$, the dimension of $H^n(V,\mathbb{C})_a$ is 1 only if n is even; otherwise it is zero.

p85$_6$: Replace $F_q^{n+1}$ with $F_q^{n+2}$.

p85$_5$: Replace $P^n$ with $P^{n+1}$.

p89$^3$: $\Sigma\, a_i \equiv 0 \pmod d$.

p98$^{15}$: Springer.

p101$^6$: Replace 149 with 147.

p104$^3$: $(X,Y) \mapsto X \otimes Y$.

p119$^1$: $(\underline{C},\otimes)$

p124$_9$: indeterminate

p147$_7$: form

p148$^{10}$: representable

p154$_7$: if and only if

p157$^5$: $\underline{\mathrm{Aut}}^{\otimes}(\omega)$

p168$_4$: $\xrightarrow{1\otimes a^{-1}}$

p198$^4$: $H^{2r-s}(X)$

p199$^{10}$: $\xrightarrow{\mathrm{id}\otimes *}$

p216$_8$: [2.0.10]

p218$_8$: Kuga-Satake

p231$^{11}$: For any L Galois over $\mathbb{Q}$,

p232$^7$: $\lambda(\iota\sigma) + \lambda(\sigma)$

p232$^9$: $\Lambda^L \subset \Lambda^F$ where $F = L \cap \mathbb{Q}^{cm}$

p232$^{11}$: $\Lambda^L \supset \Lambda^F$

p232$_1$: The diagram should be:

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

p259$^1$: Delete the second b from the first diagram.

p264$_{14}$: $z^{-p}\bar{z}^{-q}$

p271$^2$: ${}^K S^*$

p286$_4$: $\phi^0(\tau;\mu',\mu)\circ\phi^0_{\tau,\mu} = \phi^0_{\tau,\mu'}$.

p331$^1$: Delete "Shimura Varieties V.7"

p343$^4$: being in $G^{ad}(\mathbb{R})^+$.

p381$^{14}$: disco($H_d$)