

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<sub>2</sub>: motivic Galois group

p15<sub>4</sub>: This is not quite so transparent as the "and so" suggests.

p21<sup>8</sup>:  $0 \rightarrow \mathcal{O}_X^s \rightarrow 0 \rightarrow \dots$

p27<sub>11</sub>: ... and remain true, if ...

p28<sub>2</sub>:  $H^i(X)(d)$

p42<sup>3</sup>: from

p42<sup>12</sup>: The complex conjugate  $\overline{\mu(\lambda)}$  of

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

p43<sub>9</sub>: It is more natural to let  $\nu$  act as  $\nu$ .

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

p56<sub>9</sub>: and an

p61<sup>9</sup>: to  $\psi = \text{Tr}_{E/Q}(f\varphi)$ .

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

p80<sub>3</sub>: 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.

p85<sub>6</sub>: Replace  $F_q^{n+1}$  with  $F_q^{n+2}$ .

p85<sub>5</sub>: Replace  $P^n$  with  $P^{n+1}$ .

p89<sup>3</sup>:  $\sum a_i \equiv 0 \pmod{d}$ .

p98<sup>15</sup>: Springer.

p101<sup>6</sup>: Replace 149 with 147.

p104<sup>3</sup>:  $(X, Y) \mapsto X \otimes Y$ .

p119<sup>1</sup>:  $(\mathbb{C}, \otimes)$

p124<sub>9</sub>: indeterminate

p147<sub>7</sub>: form

p148<sup>10</sup>: representable

p154<sub>7</sub>: if and only if

p157<sup>5</sup>:  $\text{Aut}^{\otimes}(\omega)$

p168<sub>4</sub>:  $1 \otimes a^{-1}$

p198<sub>4</sub>:  $H^{2r-s}(X)$

p199<sup>10</sup>:  $\text{id}^{\otimes} *$

p216<sub>8</sub>: [2.0.10]

p218<sub>8</sub>: Kuga-Satake

p231<sup>11</sup>: For any L Galois over Q,

p232<sup>7</sup>:  $\lambda(\nu\sigma) + \lambda(\sigma)$

p232<sup>9</sup>:  $\Lambda^L \subset \Lambda^F$  where  $F = L \cap \mathbb{Q}^{\text{cm}}$

p232<sup>11</sup>:  $\Lambda^L \supset \Lambda^F$

p232<sub>1</sub>: The diagram should be:

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

p259<sup>1</sup>: Delete the second b from the first diagram.

p264<sub>14</sub>:  $z \cdot p\bar{z}^{-q}$

p271<sup>2</sup>:  $K_S^*$

p286<sub>4</sub>:  $\phi^0(\tau, \mu', \mu) \circ \phi_{\tau, \mu}^0 = \phi_{\tau, \mu'}^0$ .

p331<sup>1</sup>: Delete "Shimura Varieties V.7"

p343<sub>4</sub>: being in  $G^{\text{ad}}(\mathbb{R})^*$ .

p381<sup>14</sup>:  $\text{disco}(H_d)$