Erratum

Multiplicative rule of Schubert classes*

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The correct statement of [D, Lemma 4.1] should be as follows.

Lemma 4.1. *The Kronecker paring $H^2(G/T) \times H_2(G/T) \rightarrow \mathbb{Z}$ can be expressed in term of Cartan numbers as*

$$\langle e_\gamma, \varphi_{\beta*}[S(y; \beta)] \rangle = \gamma \circ \beta, \beta, \gamma \in \Phi,$$

where $[S(y; \beta)] \in H^2(S(y; \beta)) (= \mathbb{Z})$ is the orientation class.

Consequently, in [D, Definition 1], the Cartan matrix $A_w = (a_{i,j})$ of w associated to the decomposition (2.1) should be given by

$$a_{i,j} = \begin{cases} 0 & \text{if } i \geq j, \\ -\beta_j \circ \beta_i & \text{if } i < j; \end{cases}$$

and the statement (2) of [D, Lemma 4.5] should be changed to

the structure matrix of $S(y; \beta_1, \dots, \beta_k)$ (with respect to $x_1, \dots, x_k$) is $A = (a_{ij})_{k \times k}$, where

$$a_{ij} = \begin{cases} 0 & \text{if } i \geq j, \\ -\beta_j \circ \beta_i & \text{if } i < j. \end{cases}$$

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Based on [D, Theorem] a program calculating the Chow rings of flag varieties were composed [DZ]. We realized the error while testing the program for some simple cases: the Chow rings of B_3/T and C_3/T were switched.

This error takes no effect when computing with flag varieties of the types A_n , D_n , E_6 , E_7 , E_8 since their Cartan matrices are all symmetric. In contrast the Cartan matrices of B_n and C_n differ by transposition.

References

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