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• ERRATUM •

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Erratum to: Remarks on lines and minimal rational curves

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There is a mistake in the proof of [1, Lemma 2.2], which occurs in 4-th line at [1, p. 619], where we state: The last inequality holds because $r_2' - \frac{r}{(r,d)}\deg(V_2'^* \otimes V_2) < r_2$ and is divisible by r_2, thus it must be negative. Namely, in [1], we claimed that

$$r_2' - \frac{r}{(r,d)}\deg(V_2'^* \otimes V_2) < 0$$

(which implies the stability of V). However, it could be zero, i.e.,

$$r_2' - \frac{r}{(r,d)}\deg(V_2'^* \otimes V_2) \leqslant 0,$$

which only implies the semistability of V. Thus the corrected version of Lemma 2.2 in [1] should be the following lemma.

Lemma 2.2 *Let $0 \to V_1 \to V \to V_2 \to 0$ be a nontrivial extension of vector bundles on C. Let $r_i = \mathrm{rk}(V_i)$, $d_i = \deg(V_i)$ $(i = 1, 2)$, $r = \mathrm{rk}(V)$, $d = \deg(V)$ be the rank and degree, respectively. Then, when $r_1 d - d_1 r = (r, d)$, we have*

(1) *stability of V implies the stability of V_1 and V_2;*

(2) *stability of V_1 and V_2 implies that V is semi-stable and it is stable if $r_2 < \frac{r}{(r,d)}$.*

With this correction, morphism (2.2) at [1, p. 620] should be

$$\Phi : P(r_1, d_1) \to \mathcal{SU}_C(r, \mathcal{L}) \supseteq \mathcal{SU}_C(r, \mathcal{L})^s = M.$$

Replacing $P(r_1, d_1)$ by $\Phi^{-1}(M)$, all of our results in [1] hold unchanged.

References

1 Mok N, Sun X T. Remarks on lines and minimal rational curves. Sci China Ser A, 2009, 52: 617–630

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