Erratum: Integral points and effective cones of moduli spaces of stable maps Duke Mathematical Journal 120 (2003), no.3, 577-599 Brendan Hassett and Yuri Tschinkel

Abstract

We correct a sign error in the published version of the paper.

We are grateful to Ana-Maria Castravet for pointing out a sign error on page 595. The second paragraph should have read:

We extract the inequalities

$$d_{s+1} - d_s \ge -(n - s - 1)d_2.$$

Adding together the inequalities

$$\begin{array}{rcl}
 d_{n} - d_{n-1} & \geq & 0 \\
 d_{n-1} - d_{n-2} & \geq & -d_{2} \\
 & & \cdots \\
 d_{4} - d_{3} & \geq & -(n-4)d_{2} \\
 d_{3} & \geq & -(n-4)d_{2}
 \end{array}$$

gives

$$d_n \ge -\frac{n^2 - 5n + 4}{2} d_2.$$

Combining with inequality (2), we obtain

$$n(n-1)d_2 \ge -(n-4)(n-1)d_2$$

hence $d_2 \geq 0$.

To complete the proof of Theorem 4.1, we use the curve

$$W \simeq \mathbb{P}^1 := \overline{\{\rho_t(\alpha) : t \in \mathbb{G}_m\}} \subset Y_\alpha$$

introduced in the proof of Lemma 3.2. This is nef relative to Γ and satisfies

$$W \cdot B[j] = \begin{cases} 0 & \text{if } j \neq n, \\ 2 & \text{if } j = n, \end{cases}$$

which implies $d_n \geq 0$. Combining this with inequality (2) gives $d_j \geq 0$ for each j. \square