ERRATUM TO: EXTENDING THE DOUBLE RAMIFICATION CYCLE USING JACOBIANS

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After this paper was published, the authors noticed two errors which, while small, have the potential to cause some confusion.

The first concerns the definition of the cycle DR^{\diamond} . Namely, the map $\sigma_{\underline{0}}$ constructed just after Definition 1 is not a regular embedding, hence the pullback of cycles along it is not defined. In place of this, one should consider the section σ^{\diamond} defined in Diagram (13), which is a regular embedding since it is a section of a smooth separated morphism. One then defines the cycle DR^{\diamond} to be the pullback of the unit section of $\mathcal{J}_{g,n}^{\diamond}$ along σ^{\diamond} . Formula (15) can then be slightly simplified by deleting the 4th term, and all other arguments go through unchanged.

The second issue is a sign error in Formulae (18) and (20). Namely, Formula (18) should be

$$[\mathsf{DR}(\Phi)] = c_g \left(-\mathbb{R}q_* \left(\omega_C^{-\otimes k}(a_1p_1 + \ldots + a_np_n) \right) \right),$$

and Formula (20) should be

$$[\mathsf{D}\mathsf{R}_{\mathsf{L}\mathsf{G}\mathsf{V}}] = \mathsf{c}_{\mathsf{q}}(-\mathbb{R}\mathsf{q}_{*}(\mathcal{O}(\mathcal{D}(\phi)))).$$

The Chern class of a K-theory element -E can then be computed by using

$$1 = c(E - E) = c(E) \cdot c(-E),$$

where the second equality is the multiplicativity of the total Chern class.

The authors also noticed, after the paper was published, that the result they proved as Lemma 8 had already been observed and proved as Lemma 3.1 in the paper *Compactified universal Jacobian and the double ramification cycle* by Dudin.

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