Erratum to "The line bundles on moduli stacks of principal bundles on a curve"

Indranil Biswas and Norbert Hoffmann

Abstract. A missing hypothesis is added to Lemma 2.2.1 in [Doc. Math. 15 (2010), 35–72]. The rest of the text remains unchanged.

We thank Sergey Lysenko, Stefan Reppen, and Archia Ghiasabadi for pointing out that Lemma 2.2.1 in [1] is incorrect as stated. For example, if $G_1 = G_2 = 1$ is the trivial group, then also $H = 1$, and hence $\mathcal{M}_H \cong \operatorname{Spec}(k)$ is just a point, whereas $\mathcal{M}_{G_1} \times_{\mathcal{M}_G} \mathcal{M}_{G_2} \cong G$. The problem with the argument in [1] is that the scheme F constructed there might not be faithfully flat over X.

To rectify this, we add the hypothesis to Lemma 2.2.1 in [1] that one of the two groups G_1 and G_2, say G_2, is faithfully flat over G. Then E_2 is faithfully flat over E, and therefore F is faithfully flat over E_1 and thus also over X, so F is indeed a principal H-bundle over X, and the lemma follows.

Since this extra hypothesis is satisfied wherever Lemma 2.2.1 is used in [1], the rest of the paper is not affected.

References

[1] I. Biswas and N. Hoffmann, The line bundles on moduli stacks of principal bundles on a curve. *Doc. Math.* **15** (2010), 35–72 Zbl 1193.14009 MR 2628848

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