

ERRATUM TO “KOSZUL DUALITY FOR OPERADS”

V. GINZBURG AND M. KAPRANOV

In Section 2.2 of our paper “Koszul Duality for Operads” [1], the definition of the products $\bullet, \circ$ was given incorrectly. It should be replaced by the following.

For any two Σ_2 -modules V, W we have maps

$$\phi_n: F(V \otimes W)(n) \hookrightarrow F(V)(n) \otimes F(W)(n),$$

$$\psi_n: F(V)(n) \otimes F(W)(n) \rightarrow F(V \otimes W)(n).$$

The ϕ_n come from a morphism of operads $\phi = \phi_{V,W}: F(V \otimes W) \hookrightarrow F(V) \otimes F(W)$, which reflects the fact that the tensor product of an $F(V)$ -algebra and an $F(W)$ -algebra is an $F(V \otimes W)$ -algebra. The map ψ_n is dual to $\phi_{V^*,W^*,n}$.

Now, given two quadratic operads $\mathcal{P}, \mathcal{Q}$ with $\mathcal{P}(2) = V, \mathcal{Q}(2) = W$ and spaces of relations $R_{\mathcal{P}}, R_{\mathcal{Q}}$, the spaces of relations of $\mathcal{P} \circ \mathcal{Q}$ and $\mathcal{P} \bullet \mathcal{Q}$ should be defined, respectively, as

$$\phi_3^{-1}((R_{\mathcal{P}} \otimes F(W)(3)) + (F(V)(3) \otimes R_{\mathcal{Q}})),$$

$$\psi_3((R_{\mathcal{P}} \otimes F(W)(3)) \cap (F(V)(3) \otimes R_{\mathcal{Q}})).$$

All the results of Section 2.2 are valid with these definitions of the products.

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REFERENCES

- [1] V. GINZBURG AND M. KAPRANOV, *Koszul duality for operads*, Duke Math. J. **76** (1994), 203–273.

GINZBURG: DEPARTMENT OF MATHEMATICS, UNIVERSITY OF CHICAGO, CHICAGO, ILLINOIS 60637, USA

KAPRANOV: DEPARTMENT OF MATHEMATICS, NORTHWESTERN UNIVERSITY, EVANSTON, ILLINOIS 60208, USA

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