



## Erratum

# Erratum to: Perturbation Formulas for Traces on Normed Ideals

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In the case of a type  $\text{II}_\infty$  factor, the definition of  $\|A\|_{\mathcal{I}}$  found in Eq. (2.4) of the original article should be modified to

$$\mathcal{I} = \left\{ A \in \mathcal{B} \mid \|A\|_{\mathcal{I}} := \max \left\{ \|A\|, \sup_{t>0} \frac{1}{\psi(t)} \int_0^t \mu_s(A) ds < \infty \right\} \right\},$$

where  $\|\cdot\|$  is the operator norm. We note that Proposition 2.5 holds also with this new definition of  $\|\cdot\|_{\mathcal{I}}$ , making use of the existing proof for the case of the old definition of  $\|\cdot\|_{\mathcal{I}}$  and the fact that for the operator norm, we have  $\|B\| = \||B|| = \||B|^p\|^{1/p}$ . This modification is needed so that condition (ii) of Definition 2.1 (of an ideal norm) holds. As this condition holds automatically for Marcinkiewicz ideals in type  $\text{I}_\infty$  factors, the unmodified form of Eq. (2.4) may be used for  $\text{I}_\infty$  factors.

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