

Erratum: Monitoring approach to open quantum
dynamics using scattering theory
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The line of reasoning leading to the complementary map $\mathcal{M}(\varrho|\bar{C}_{\Delta t}) = \varrho - \Gamma^{1/2} \varrho \Gamma^{1/2} \Delta t$ is incorrect. As mentioned in [1], this form of the *not* completely positive map $\mathcal{M}(\cdot|\bar{C}_{\Delta t})$ is rather fixed by the requirement that the total state remains unchanged, to leading order in Δt , if the scattering has no effect, i.e. for $S = I$.

The results of the article are not affected by this.

References

- [1] K. Hornberger, *Introduction to decoherence theory*, in: A. Buchleitner, C. Viviescas, M. Tiersch (Ed.) Entanglement and Decoherence. Foundations and Modern Trends, Springer, Berlin (2009), pp. 221-276.