

Deterministic photon source of genuine three-qubit entanglement



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Editorial note: This manuscript has been previously reviewed at another journal that is not operating a transparent peer review scheme. This document only contains reviewer comments and rebuttal letters for versions considered at *Nature Communications*.

REVIEWERS' COMMENTS

Reviewer #2 (Remarks to the Author):

I believe all technical issues have been addressed in this revised manuscript. All reviewers raised concerns about the differences from previous work, which I believe the authors have also answered adequately. Therefore, I recommend this paper for publication in *Nature Communications*.

Reviewer #3 (Remarks to the Author):

I think the authors for their careful and detailed replies to the previous submission round, and I believe the current version of the paper should be published in *Nature Communications*.

The only thing I disagree with is the continued use of the word "infidelity". Just because it has been partly used in the past, does not justify the use of such wording in this day and age. I suggest to just call it Fidelity Error, and have a remark that this is often also termed in fidelity (maybe as a footnote) - no point is supporting such a bad choice of wording, and hopefully others will follow!

Response to the Reviewers

We thank again to all reviewers for taking their time to review our paper and support for publication.

Moreover, we address the only remaining remark from Reviewer 3.

Reviewer 3 (Remarks to the Author): I think the authors for their careful and detailed replies to the previous submission round, and I believe the current version of the paper should be published in Nature Communications.

The only thing I disagree with is the continued use of the word "infidelity". Just because it has been partly used in the past, does not justify the use of such wording in this day and age. I suggest to just call it Fidelity Error, and have a remark that this is often also termed in fidelity (maybe as a footnote) - no point is supporting such a bad choice of wording, and hopefully others will follow!

Response: Thanks for the suggestion. We have replaced "infidelity" in the main text and supplementary material with "fidelity error".