npj | quantum information

Corrections & amendments

Published in partnership with The University of New South Wales

https://doi.org/10.1038/s41534-025-01127-5

Author Correction: Time-bin entangled Bell state generation and tomography on thin-film lithium niobite

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Correction to: ***npj Quantum Information*** **https://doi.org/10.1038/s41534-024-00925-7, published online 30 December 2024**

The original version of this Article contained several errors:

1. The units related to the pump power used in the experiments have been corrected from μs to μW.
2. Page 3: the sentence 'Early, late and on-time state form a qutrit to be analysed by Franson interferometry" has been rephrased to 'The on-time measurement outcome arise from the probabilistic projection of the time-bin qubit on the Bloch sphere equator.'
3. Page 5: the sentence '..., which is close to the expected value of 0.5 bit characteristic of a maximally entangled Bell state.' has been rephrased to '..., with the theoretical limit being 0 bit. We attribute deviations from the expected value to phase fluctuations at the pump preparation interferometer. Nevertheless, by tracing out one qubit, we quantify the von Neumann entropy in the reduced space to be 0.98+-0.01 bit. This shows that separation of the two qubits results in a close to completely mixed state, hence further confirming that a highly entangled state was generated.'
4. Fig. 4e has been updated to show the entropy of the single qubit obtained with a Monte Carlo simulation.

These errors have now been corrected in both the PDF and HTML versions of the Article.

Published online: 23 October 2025