Detecting non-Gaussian entanglement using neural networks

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Physique quantique et applications

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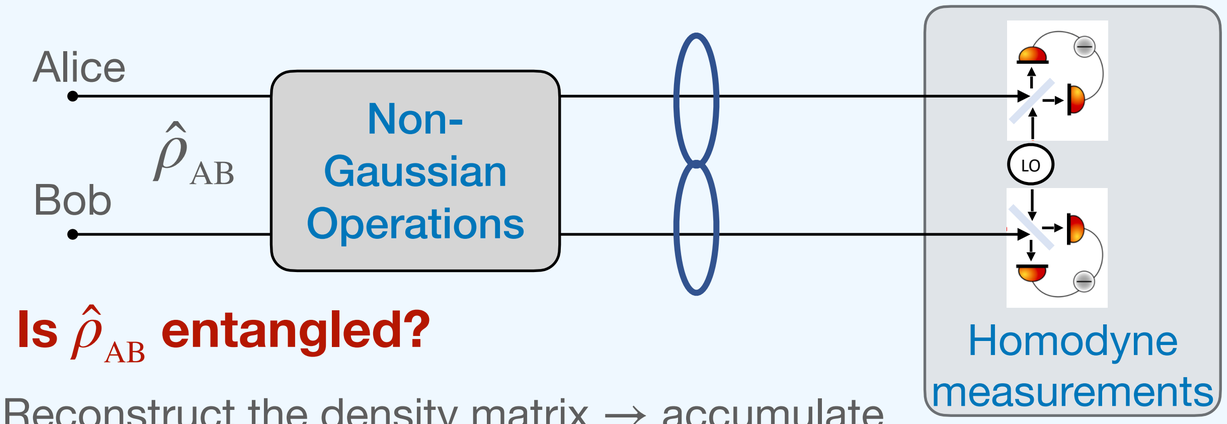
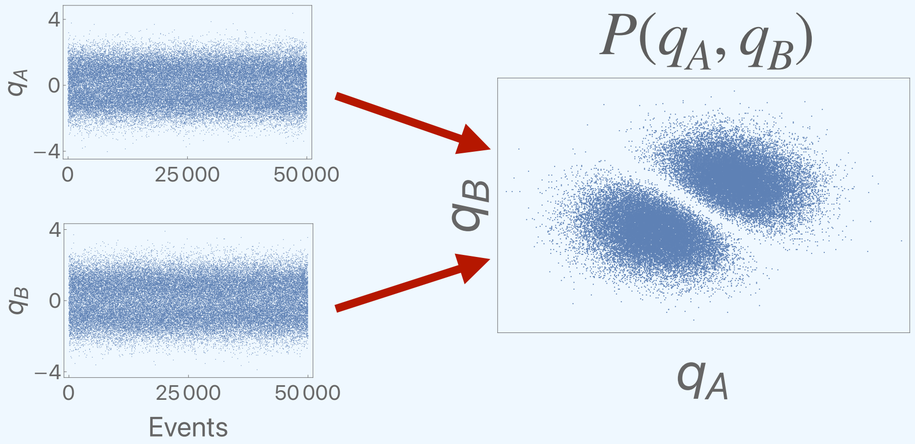
Problem



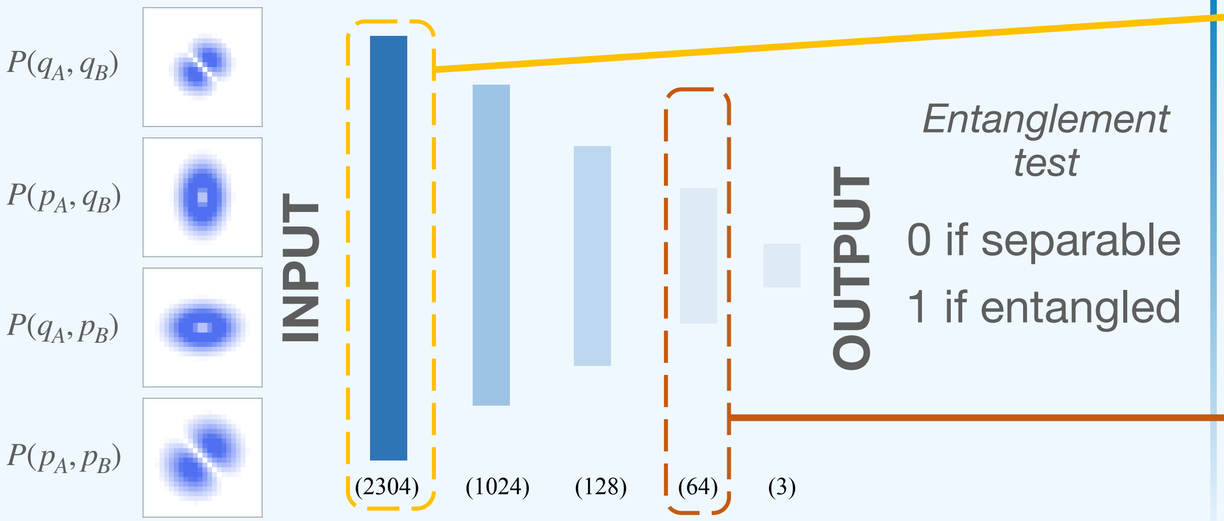
Is $\hat{\rho}_{AB}$ entangled?

Reconstruct the density matrix → accumulate many data and use a *maximum likelihood algorithm*

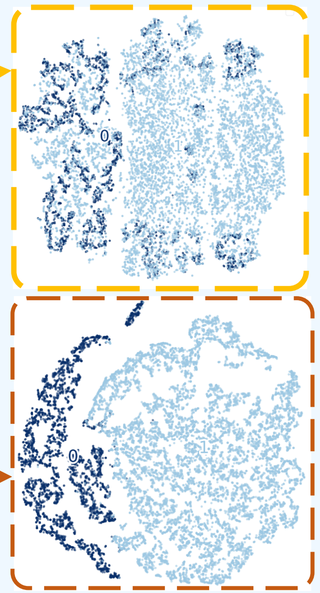
We can recover the statistics of $\hat{q}$ and $\hat{p}$

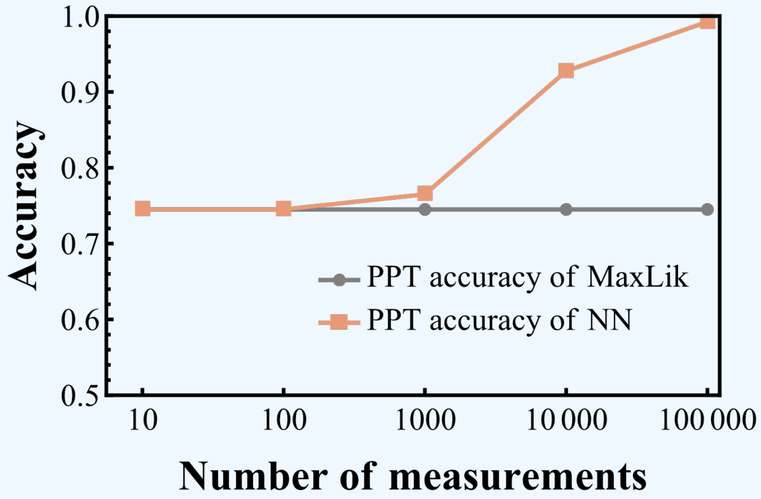


Neural network



Results





arXiv:2310.20570 (2023)