## 24th Australian Institute of Physics Congress



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## A Moments Based Estimate of Trial State Fidelity for Variational Quantum Computation

Thursday 15 December 2022 18:45 (15 minutes)

We present a new parameter  $s_*$ , determined by Hamiltonian moments  $\langle \phi | H^* n | \phi \rangle$ , as an estimate of the overlap between a trial state  $| \phi \rangle$  and energy eigenstates of the problem Hamiltonian.

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