

A Quantum Theory of Biological Systems

From open quantum dynamics in biological proteins to quantum design rules for bio-organic nanodevices

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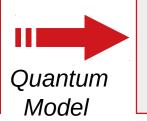
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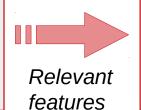
Motivation & Objectives



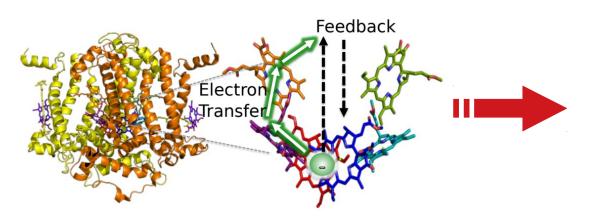
Efficient Biological Processes

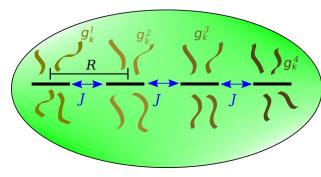


Simulations & Analysis



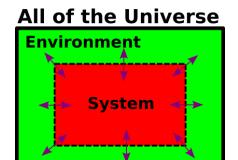
Design rules



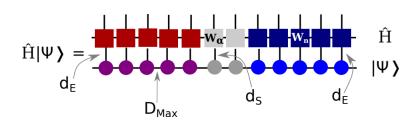


Approach & Results

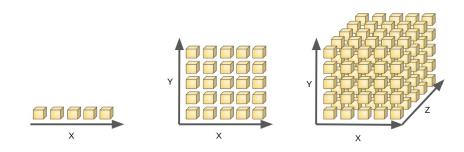




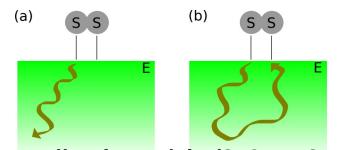
Open Quantum System



Tensor Networks



Curse of dimensionality



https://arxiv.org/abs/2107.11217

Thank you for your attention



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