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## **A cellular automata model of energy transfer for quantum vs classical comparisons**

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I will present a model for energy transfer on a chain of qubits based on a QCA structure. While the problem of energy transfer is usually relevant in a quantum communication context, we are mostly inspired by the recent years' growing interest in understanding whether certain biological systems may or may not be affected by quantum effects. In this respect, we construct a class of models which allow for contrasting classical stochastic dynamics – namely, random walks – with analogue quantum dynamics, and present a comparative analysis.