

# Multipartite entanglement generation assisted by inhomogeneous coupling

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<http://link.aps.org/doi/10.1103/PhysRevA.85.032319> [2]

We show that controllable inhomogeneous coupling between two-level systems and a common data bus provides a fast mechanism to produce multipartite entanglement. Our proposal combines resonant interactions and engineering of coupling strengths—between the qubits and the single mode—leading to well-defined entangled states. Furthermore, we show that, if the two-level systems interact dispersively with the quantized mode, engineering of coupling strengths allows the controlled access of the symmetric Hilbert space of qubits.

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