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Modeling Quantum Energy Teleportation RACHEL GARDNER, JEAN-FRANCOIS VAN HUELE, Brigham Young University — Quantum teleportation is a well-established procedure that uses the quantum resources of entanglement and joint measurement to recover information remotely without ever propagating that information through space and time. In contrast, the idea of quantum *energy* teleportation (QET) has been proposed more recently with both similarities and differences in theory and principles from quantum information teleportation (QIT). I review the principles behind QET and connect Masahiro Hotta's simplified model of QET with QIT. Upon confirming theoretically the ability of successful energy extraction, I analyze Hotta's model further to understand its basic elements and search for alternate models to maximize the energy extraction.

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