

Abstract Submitted
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Excitation Energy Transport in Molecular Systems Coupled to a Thermal Environment VIKTOR TURNER, SETH RITTENHOUSE, United States Naval Academy — We investigated potential coherence of exciton modes through photosynthetic structures, which may contribute to the high efficiency energy transport which has been observed experimentally. We modeled the system as excitations on a lattice coupled to a thermal environment. Using the quantum master equation, we explored the roles of nonlocal dephasing and incoherent drive on the efficiency of the energy transport through the system.

Viktor Turner
United States Naval Academy

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