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**Benchmarking Multiband Cluster Typical Medium Theory** CONRAD MOORE, YI ZHANG, KA MING TAM, JUANA MORENO, MARK JARRELL, Louisiana State University — We perform transfer matrix calculations on a non-interacting multiple band disordered system with diagonal and off-diagonal disorder. The mobility edge is determined by finite size scaling. We compare with mobility edge predictions from the Typical Medium Dynamical Cluster Approximation (TMDCA). From these results, we discuss the applicability of TMDCA to study localization in realistic disordered systems.

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