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**Magnetic Field Effects on Dynamical Spectral Weight Transfer in the Hubbard Model** CHRISTIAN BOYD, PHILIP PHILLIPS, Univ of Illinois - Urbana — Some twenty years ago, dynamical spectral weight transfer provided the mechanism by which spectral weight in the lower Hubbard band could, even at half-filling, exceed the doping level. The relative significance of dynamical spectral weight transfer depends crucially on the ground state configuration and its influence on electron hopping. Precise details about the ground state configuration may be difficult to determine; however, strong coupling transformations provide a clear picture in terms of energetically-favorable ordering within a simpler model. An external magnetic field complicates the issue by influencing magnetic order in the ground state and coupling to the hopping dynamics of the electrons. We explore the resulting changes in the dominant dynamical contributions to the spectral weight in the lower Hubbard band.

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