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Spectral functions of fullerene molecules and solids FEI LIN, ERIK SORENSEN, CATHERINE KALLIN, JOHN BERLINSKY, McMaster University — There have been lots of interests in producing and engineering the fullerene materials, either because of their highly symmetric molecular geometry, the discovery of superconductivity in doped C60 materials, or their potential applications in nano devices. In this talk I will report some Quantum Monte Carlo/exact diagonalization calculations of the single-particle spectral properties on the Hubbard C20 molecule and its possible lattices. Similar calculations on the C36 and C60 materials may also be presented.

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