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On the band structure of bond-centered stripes MATS GRANATH,

Goteborg University — We study the band structure of a stripe ordered system through mean-field treatments of both single and three band models for the Cu-O plane of the cuprate superconductors. The results suggest that the striking difference between low-energy nodal and anti-nodal excitations seen by ARPES [PRL 92, 187001 (2004)] in underdoped LSCO may be related to the parity of states living on bond-centered stripes and the corresponding coupling to the particular charge sensitive Cu-O bond-stretching phonon.

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