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Indications of c-axis Charge Transport in Hole Doped Triangular Antiferromagnets LIANG Ying,<sup>1</sup> LIU Bin,<sup>1</sup> and FENG Shi-Ping<sup>2, 3, 4</sup>

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Abstract: The c-axis charge transport of the hole doped triangular antiferromagnet is investigated within the t-J model by considering the incoherent interlayer hopping. It is shown that the c-axis charge transport of the hole doped triangular antiferromagnet is essentially determined by the scattering from the in-plane fluctuation. The c-axis conductivity spectrum shows a low-energy peak and the unusual high-energy broad band, while the c-axis resistivity is characterized by a crossover from the high temperature metallic-like behavior to the low temperature insulating-like behavior, which is qualitatively consistent with those of the hole doped square lattice antiferromagnet.

PACS: 71.27.+a, 72.10.-d, 74.72.-h Key words: c-axis charge transport, triangular lattice, t-J model

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