

Abstract Submitted
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High Energy features in the photoemission spectra of cuprates

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— We calculate the real part of the self-energy of fermions scattering off the quantum critical fluctuations derived for cuprates. At the upper cut-off of the quantum critical fluctuation spectra a logarithmic divergence in the real part of the self-energy occurs. The position of the peak of the one-particle spectral function is pinned near this divergence. This explains the recent high energy features observed in angle-resolved photoemission in cuprates superconductors.

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