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Signatures of superconducting gap inhomogeneities in the optical conductivity J. LEBLANC, E.J. NICOL, University of Guelph, J.P. CARBOTTE, McMaster University — The observation of energy gap inhomogeneities in the BISSCO high T_c cuprates motivates studying such effects on other properties. We have calculated the optical conductivity using an effective medium approximation to mix superconducting regions with different energy gaps. We present our results and comment on possible signatures in the conductivity and optical self-energy.

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