Dielectric Response of Metallic Nanoclusters AMY CASSIDY, University of Southern California, STEPHAN HAAS, A.F.J. LEVI — We study the dielectric function for metallic nanoclusters. The dielectric function is calculated from the eigenstates, using a tight-binding Hamiltonian. I will present our findings on the dependence of surface plasmon frequency and oscillator strength on the system size and geometry.