compared to YBCO with $T_c \approx 90K$, or the mechanism is always phonons, and the absence of the isotope effect in YBCO is due to something else. I prefer the last option.
In its favor speak also the tunneling spectra at higher voltages in $Nd_{2-x}Ce_xCuO_4$ (NCCO) [3] (Fig.2) and in $Bi_2Sr_2CaCu_2O_8$ (BSCCO) [4] (Fig.3). The Eliashberg interaction constant $\alpha^2F(\omega)$ extracted from the tunneling conductance has a shape corresponding to the phonon density of states $F(\omega)$ obtained from inelastic neutron scattering. The deep minima in $\alpha^2F(\omega)$ compared to $F(\omega)$ can be attributed to the fact that electrons interact differently with different phonons.

2. Extended saddle point singularities

A few years ago two experimental groups: J.-C.Campuzano's from Argonne [5] and Z.-X.Shen's from Stanford [6], investigating angle resolved photoemission spectra (ARPES), discovered that the dependence of the energy of quasiparticles on their momentum $\varepsilon(k_x,k_y)$ (the dependence on k_z is weak due to quasi-two-dimensionality) has flat regions, where it does not depend on one of the components, so that the spectrum becomes quasi-one-dimensional in these regions (Fig.4).

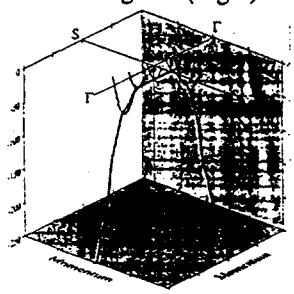

Fig. 4. ARPES result for the dependence of quasiparticle energy on components of quasimomentum in the vicinity of the extended saddle point singularity.

This was first discovered in YBCO, $YB_2Cu_4O_8$, BSCCO, and appeared also in band structure calculations by several groups, particularly, A.Freeman's [7], for mercury compounds. Such a feature in the spectrum was called "extended saddle point singularity". The density of states in the vicinity of such a singularity is proportional to $(\varepsilon - \varepsilon_o)^{-1/2}$. If the Fermi energy is close to ε_o, this enhancement is more than sufficient to explain the high values of T_c assuming the usual strength of the electron-phonon interaction.

The second feature is that the integral entering the BCS equation

$$\Delta(\mathbf{p}) = \int K(\mathbf{p},\mathbf{p}')\, f[\Delta(\mathbf{p}')]\, d^3\mathbf{p}'/(2\pi)^3, \tag{1}$$

which is logarithmically divergent, if the density of states is constant, becomes convergent. In the case, if $\varepsilon_F - \varepsilon_o \ll \omega_o$, ω_o being some character-istic phonon frequency, the critical temperature does not depend on ω_o, and hence there is no isotope effect. The BCS-type formula for T_c for this case has the form:

$$T_c = \frac{8\gamma(\varepsilon_F-\varepsilon_o)}{\pi} \exp\left[- \frac{4\sqrt{2}\pi^2(n-1)(\varepsilon_F-\varepsilon_o)^{1/2}}{gm^{1/2}\kappa^2} \right] \tag{2}$$

The most important here is the appearance of $\varepsilon_F - \varepsilon_o$ in the exponent and in the prefactor (I will not explain the meaning of other notations in this expression). If the distance $\varepsilon_F - \varepsilon_o$ increases, T_c decreases,