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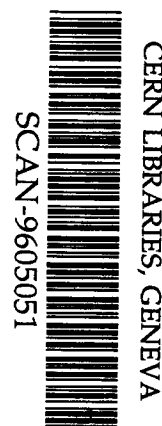
IFT-P.009/96

**Addendum: Pion to upsilon from  $\kappa$  - deformed  
Poincaré phenomenology\***  
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It has been pointed out to us that in our paper we have talked about the  $L = 1$  states for the  $\rho$  meson without quoting the actual numbers. Indeed the fit is quite impressive. As  $S = J = 1$  excitation of the pion we had the  $\rho$  and the  $\omega$  degenerate at 774.9. All numbers are in MeV. The  $L = 1$  states and their experimental assignments are as follows:  ${}^3P_0$  1296 is compared to  $f_0(1370)$ ,  $a_0(1450)$ ,  ${}^3P_1$  1362 is compared to  $f_1(1285)$ ,  $a_1(1260)$  and  ${}^3P_2$  1424 is compared to  $f_2(1430)$ ,  $a_2(1320)$ .

We give the other experimentally identifiable states also: for  $L = 2$  there is only  ${}^3D_1$  1714 to compare with  $\omega(1600)$ ,  $\rho(1700)$  and  ${}^3D_3$  1799 with  $\omega_3(1670)$ ,  $\rho_3(1690)$ . For  $L = 3$  we have  ${}^3F_4$  2072 to compare with  $f_4(2050)$ ,  $a_4(2040)$  and  ${}^3F_3$  2041 to compare with  $a_3(2050)$ . For  $L = 4$  we have  ${}^3G_3$  2237 and  ${}^3G_5$  2289 to compare with  $\rho_3(2250)$ ,  $\rho_5(2350)$  and for  $L = 5$  the  ${}^3H_6$  2468 fits remarkably well with  $a_6(2450)$   $f_6(2510)$ .

For radial excitations we have 1473 ( $n = 1$ ) to compare with  $\omega(1420)$ ,  $\rho(1450)$ , 2148 ( $n = 3$ ) to compare with  $\rho(2150)$  and 2371 ( $n = 4$ ) with  $\rho(2210)$ .

For states which are not observed, our calculation agrees with other theoretical calculations.