Radϕ yields, 4γ events

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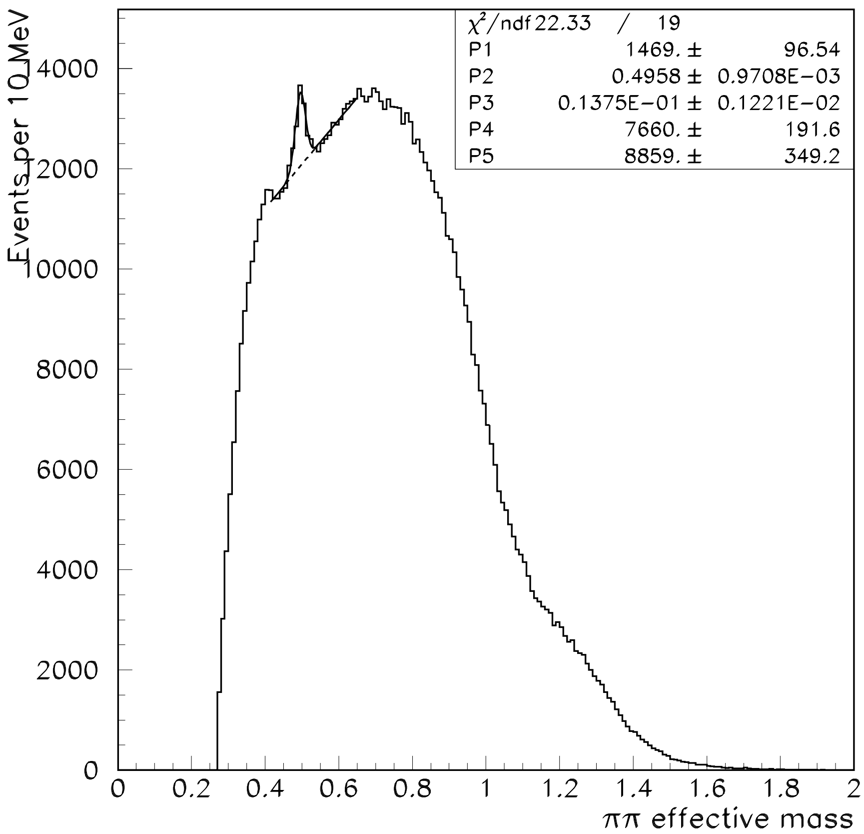

Figure 1: The $\pi^0\pi^0$ effective mass distribution. The π^0 mass has been used as a constraint. The narrow structure at 497 MeV is due to the decay $K_s \to \pi^0\pi^0$.

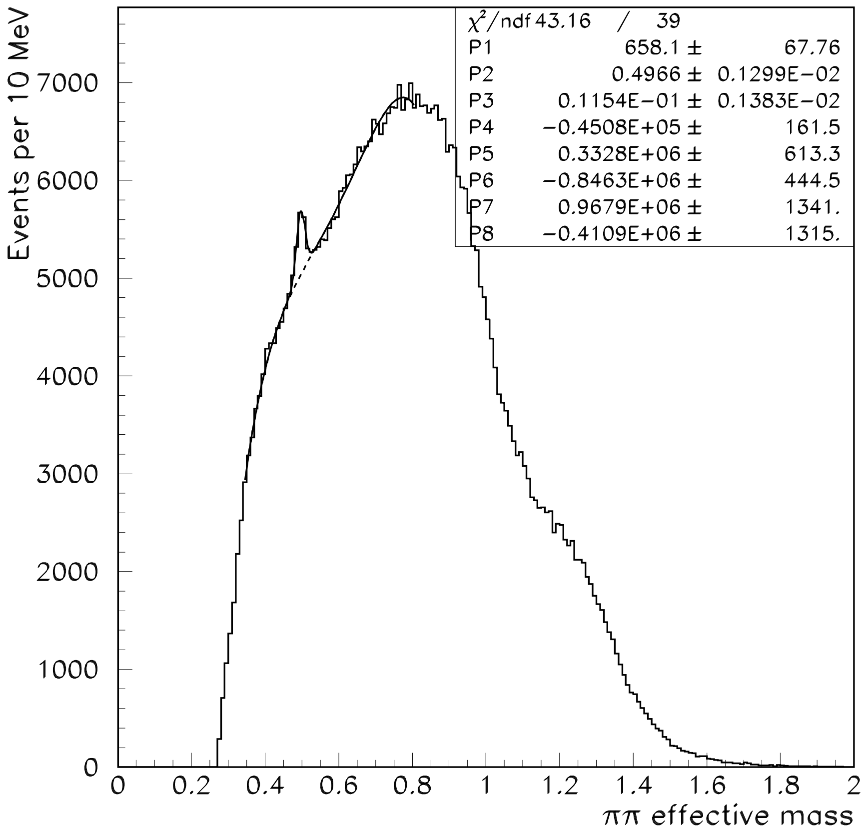

Figure 2: As in figure 1 but with the additional requirement that the total energy deposited in the LGD *exceeds* 4.0 GeV. The narrow structure at 497 MeV persists but with a reduced intensity. The fraction of events below 500 MeV is reduced indicating that these events are poorly contained. Shouldering above 1.0 GeV has become apparent.

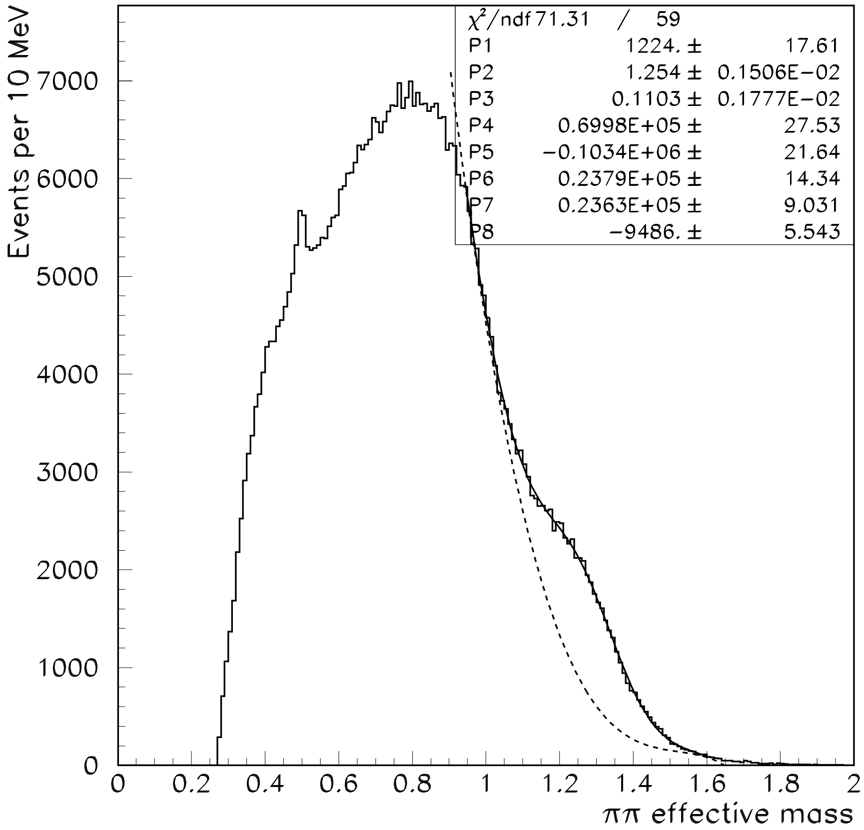

Figure 3: As in figure 2 with a fit to the broad structure at 1254 MeV due to the decay $f_2(1275) \rightarrow \pi^0\pi^0$. The value of the mass determined by this fit is highly dependent on the form of the background chosen (a fourth order polynomial here) and its error should be taken as dominated by systematic effects at this time.

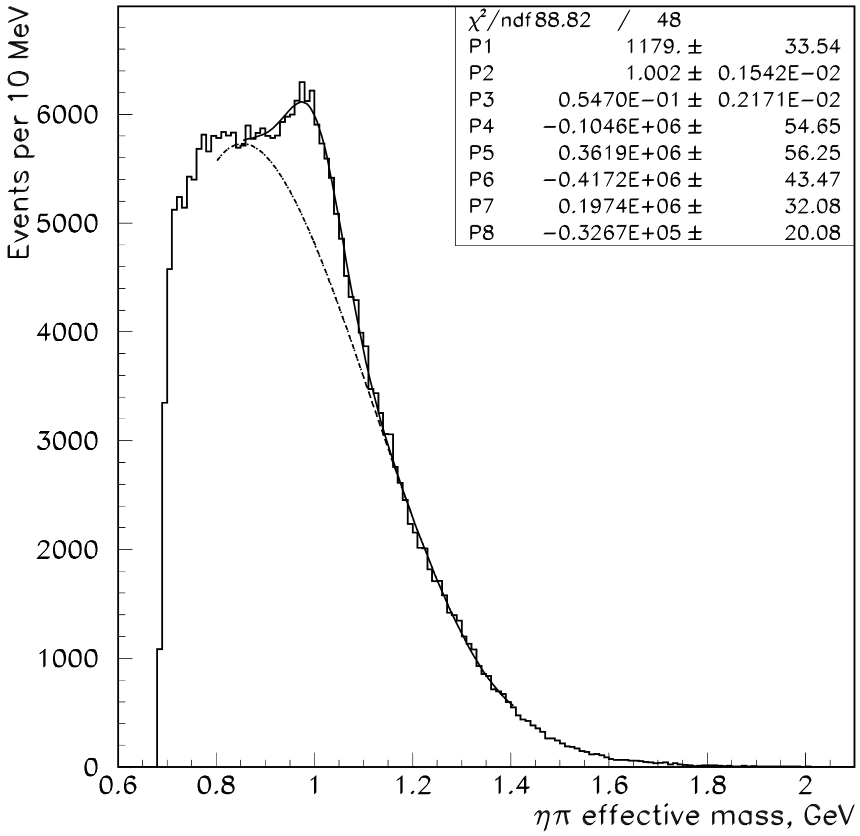

Figure 4: The $\eta\pi^0$ effective mass distribution. It is required that the total energy deposited in the LGD exceeds 4.0 GeV and that no acceptable assignment to the $\pi^0\pi^0$ hypothesis exists. The π^0 and η effective masses have been used as constraints. The structure near 1000 MeV is suggestive of evidence for the decay $a_0(980) \rightarrow \eta\pi^0$. Direct $a_0(980)$ photoproduction is unlikely so this peak must be examined carefully before conclusions as as to its nature are reached.