in $K_S \to \pi^+\pi^-\pi^0$ Final 208,000 ev

$\pi^0\pi^0\pi^0$ Prel. 4,300 ev. (25% data)

CP eigenvalues for 3π is $(-1)^{1+l}$ where $l = \measuredangle$ momenta $\therefore$

$K_S \to 3\pi$ $\to$ $l=0$ $\cancel{CP}$

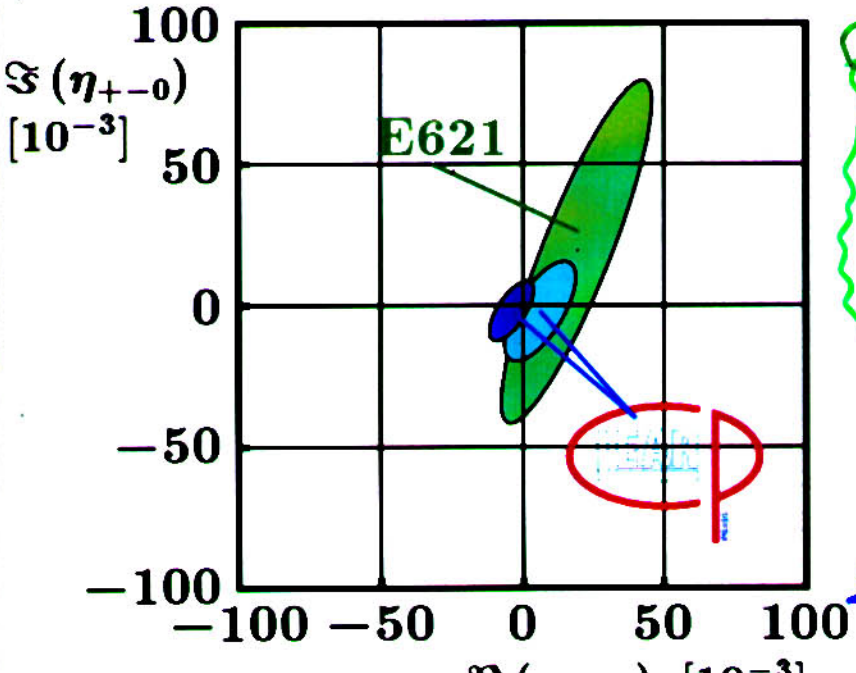
$\to$ $l=1$ Kinematically suppressed

$\eta_{3\pi} = \varepsilon + \varepsilon'_{3\pi}$

Actually measured:

$$A_{+-0}(\tau) = \Gamma(\bar{K}^0 \to \pi^+\pi^-\pi^0) - \Gamma(K^0 \to \pi^+\pi^-\pi^0) / (\text{"}+\text{"})$$

$$\propto \mathrm{Re}(\eta_{+-0})\cos(\Delta m\tau) - \mathrm{Im}(\eta_{+-0})\sin(\Delta m\tau)$$



$\mathrm{Re}(\eta_{+-0}) = (-2 \pm 7^{+4}_{-1}) \cdot 10^{-3}$

$\mathrm{Im}(\eta_{+-0}) = (-2 \pm 9^{+2}_{-1}) \cdot 10^{-3}$

(May 97, CERN/PPE 97-54)

$\mathrm{Re}(\eta_{000}) = (0.15 \pm 0.3)$

$\mathrm{Im}(\eta_{000}) = (0.29 \pm 0.4)$