

Report on LZ10772, Adams et al, Confirmation of a $\pi_1^0 \dots$

By mistake, one point was omitted from the first report. Here it is.

7) On page 3, the paper says ‘The mass dependence of UNPW waves were chosen to be polynomials of second order with constant phase except for the S_0 wave’. It is desirable to document what this means. A second order polynomial with constant phase is inconsistent with analyticity, so this is not a good choice; only a constant or linear amplitude is consistent with a constant phase. However, it may not make much difference.

Dzierba et al tried the $a_0(1450)$ in their fit; this should at least be tried. Some comment on this point is desirable for comparison with their work. It is also necessary to be careful with the $a_0(980)$. A Breit-Wigner amplitude with constant width is a very poor approximation to the correct Flatté formula: the phase variation above the KK threshold differs seriously between these two formulae. This point and the $a_0(1450)$ may have some relevance to fitting the $H(10,11)$ moments.