$\Phi(1860)$

$I(J^P) = \frac{3}{2}(?^?)$ Status: *

OMITTED FROM SUMMARY TABLE

A peak seen in the $\Xi^-\pi^-$ invariant-mass spectrum. Confirmation is needed. The minimum quark content would be $ssdd\overline{u}$.

$\Phi(1860)$ MASS

VALUE (MeV)	*EVTS*	*DOCUMENT ID*		*TECN*	*COMMENT*
1862 ±2	36	[1] ALT	04	NA49	pp, $\sqrt{s} = 17.2$ GeV

$\Phi(1860)$ WIDTH

VALUE (MeV)	*CL%*	*DOCUMENT ID*		*TECN*	*COMMENT*
<18	90	[1] ALT	04	NA49	pp, $\sqrt{s} = 17.2$ GeV

[1] ALT 04 estimates a peak of 38 $\Xi^-\pi^-$ events above a background of 43 events and claims a significance of 4.2 standard deviations. Combining $\Xi^-\pi^-$, $\Xi^-\pi^+$, $\overline{\Xi}^+\pi^+$, and $\overline{\Xi}^+\pi^-$ events, ALT 04 estimates a peak of 69 over a background of 75, for 5.8 σ. However, when the number of bins searched in is taken into account, the significance then falls to 4.2 σ.

$\Phi(1860)$ REFERENCES

ALT 04 PRL 92 042003 C. Alt *et al.* (CERN NA49 Collab.)