# $\phi_3(1850)$

$I^G(J^{PC}) = 0^-(3^{--})$

## $\phi_3(1850)$ MASS

| *VALUE* (MeV) | *EVTS* | *DOCUMENT ID* | | *TECN* | *COMMENT* |
|---|---|---|---|---|---|
| **1854± 7 OUR AVERAGE** | | | | | |
| 1855±10 | | ASTON | 88E | LASS | 11 $K^- p \to K^- K^+ \Lambda$, $K^0_S K^\pm \pi^\mp \Lambda$ |
| $1870^{+30}_{-20}$ | 430 | ARMSTRONG | 82 | OMEG | 18.5 $K^- p \to K^- K^+ \Lambda$ |
| 1850±10 | 123 | ALHARRAN | 81B | HBC | 8.25 $K^- p \to K \overline{K} \Lambda$ |

## $\phi_3(1850)$ WIDTH

| *VALUE* (MeV) | *EVTS* | *DOCUMENT ID* | | *TECN* | *COMMENT* |
|---|---|---|---|---|---|
| $\mathbf{87^{+28}_{-23}}$ **OUR AVERAGE** Error includes scale factor of 1.2. | | | | | |
| 64±31 | | ASTON | 88E | LASS | 11 $K^- p \to K^- K^+ \Lambda$, $K^0_S K^\pm \pi^\mp \Lambda$ |
| $160^{+90}_{-50}$ | 430 | ARMSTRONG | 82 | OMEG | 18.5 $K^- p \to K^- K^+ \Lambda$ |
| $80^{+40}_{-30}$ | 123 | ALHARRAN | 81B | HBC | 8.25 $K^- p \to K \overline{K} \Lambda$ |

## $\phi_3(1850)$ DECAY MODES

| | Mode | Fraction ($\Gamma_i/\Gamma$) |
|---|---|---|
| $\Gamma_1$ | $K\overline{K}$ | seen |
| $\Gamma_2$ | $K\overline{K}^*(892)+$ c.c. | seen |

## $\phi_3(1850)$ BRANCHING RATIOS

**$\Gamma(K\overline{K}^*(892)+\text{c.c.})/\Gamma(K\overline{K})$** **$\Gamma_2/\Gamma_1$**

| *VALUE* | *DOCUMENT ID* | | *TECN* | *COMMENT* |
|---|---|---|---|---|
| $\mathbf{0.55^{+0.85}_{-0.45}}$ | ASTON | 88E | LASS | 11 $K^- p \to K^- K^+ \Lambda$, $K^0_S K^\pm \pi^\mp \Lambda$ |
| • • • We do not use the following data for averages, fits, limits, etc. • • • | | | | |
| 0.8 ±0.4 | ALHARRAN | 81B | HBC | 8.25 $K^- p \to K \overline{K} \pi \Lambda$ |

## $\phi_3(1850)$ REFERENCES


| | | | | |
|---|---|---|---|---|
| ASTON | 88E | PL B208 324 | D. Aston *et al.* | (SLAC, NAGO, CINC, INUS) IGJPC |
| ARMSTRONG | 82 | PL 110B 77 | T.A. Armstrong *et al.* | (BARI, BIRM, CERN+) JP |
| ALHARRAN | 81B | PL 101B 357 | S. Al-Harran *et al.* | (BIRM, CERN, GLAS+) |


## OTHER RELATED PAPERS


| | | | | |
|---|---|---|---|---|
| CORDIER | 82B | PL 110B 335 | A. Cordier *et al.* | (LALO) |
| ASTON | 80B | PL 92B 219 | D. Aston | (BONN, CERN, EPOL, GLAS, LANC+) |