

# $\pi_2(2100)$

$$I^G(J^{PC}) = 1^-(2^-+)$$

OMITTED FROM SUMMARY TABLE

Needs confirmation.

## $\pi_2(2100)$ MASS

<u>VALUE (MeV)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b>2090 ± 29 OUR AVERAGE</b>			
2090 ± 30	<sup>1</sup> AMELIN	95B VES	36 $\pi^- A \rightarrow \pi^+ \pi^- \pi^- A$
2100 ± 150	<sup>2</sup> DAUM	81B CNTR	63,94 $\pi^- p \rightarrow 3\pi X$

<sup>1</sup> From a fit to  $J^{PC} = 2^-+ f_2(1270)\pi, (\pi\pi)_S\pi$  waves.

<sup>2</sup> From a two-resonance fit to four  $2^-0^+$  waves.

## $\pi_2(2100)$ WIDTH

<u>VALUE (MeV)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b>625 ± 50 OUR AVERAGE</b> Error includes scale factor of 1.2.			
520 ± 100	<sup>3</sup> AMELIN	95B VES	36 $\pi^- A \rightarrow \pi^+ \pi^- \pi^- A$
651 ± 50	<sup>4</sup> DAUM	81B CNTR	63,94 $\pi^- p \rightarrow 3\pi X$

<sup>3</sup> From a fit to  $J^{PC} = 2^-+ f_2(1270)\pi, (\pi\pi)_S\pi$  waves.

<sup>4</sup> From a two-resonance fit to four  $2^-0^+$  waves.

## $\pi_2(2100)$ DECAY MODES

Mode	Fraction ( $\Gamma_i/\Gamma$ )
$\Gamma_1$ $3\pi$	seen
$\Gamma_2$ $\rho\pi$	seen
$\Gamma_3$ $f_2(1270)\pi$	seen
$\Gamma_4$ $(\pi\pi)_S\pi$	seen

## $\pi_2(2100)$ BRANCHING RATIOS

<b><math>\Gamma(\rho\pi)/\Gamma(3\pi)</math></b>	<b><math>\Gamma_2/\Gamma_1</math></b>
<u>VALUE</u>	<u>DOCUMENT ID</u> <u>TECN</u> <u>COMMENT</u>
<b>0.19 ± 0.05</b>	<sup>5</sup> DAUM 81B CNTR 63,94 $\pi^- p$
<b><math>\Gamma(f_2(1270)\pi)/\Gamma(3\pi)</math></b>	<b><math>\Gamma_3/\Gamma_1</math></b>
<u>VALUE</u>	<u>DOCUMENT ID</u> <u>TECN</u> <u>COMMENT</u>
<b>0.36 ± 0.09</b>	<sup>5</sup> DAUM 81B CNTR 63,94 $\pi^- p$
<b><math>\Gamma((\pi\pi)_S\pi)/\Gamma(3\pi)</math></b>	<b><math>\Gamma_4/\Gamma_1</math></b>
<u>VALUE</u>	<u>DOCUMENT ID</u> <u>TECN</u> <u>COMMENT</u>
<b>0.45 ± 0.07</b>	<sup>5</sup> DAUM 81B CNTR 63,94 $\pi^- p$

### **D-wave/S-wave RATIO FOR $\pi_2(2100) \rightarrow f_2(1270)\pi$**

<u>VALUE</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b><math>0.39 \pm 0.23</math></b>	<sup>5</sup> DAUM	81B CNTR	63,94 $\pi^- p$

<sup>5</sup>From a two-resonance fit to four  $2^-0^+$  waves.

---

### **$\pi_2(2100)$ REFERENCES**

AMELIN	95B PL B356 595	D.V. Amelin <i>et al.</i>	(SERP, TBIL)
DAUM	81B NP B182 269	C. Daum <i>et al.</i>	(AMST, CERN, CRAC, MPIM+)

---