

**$P_c(4450)^+$** 

Status: \*

A resonance seen in  $\Lambda_b^0 \rightarrow P_c^+ K^-$ , then  $P_c \rightarrow J/\psi p$ , with a significance of 12 standard deviations. The  $J/\psi p$  quark content is  $uudc\bar{c}$ , a pentaquark. See also the  $P_c(4380)^+$ . In the best amplitude fit, the two states have opposite parity, one having  $J = 3/2$ , the other  $J = 5/2$ .

 **$P_c(4450)^+$  MASS**

<u>VALUE (MeV)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b>4449.8±1.7±2.5</b>	AAIJ	15P	LHCB $pp$ at 7, 8 TeV

 **$P_c(4450)^+$  WIDTH**

<u>VALUE (MeV)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b>39±5±19</b>	AAIJ	15P	LHCB $pp$ at 7, 8 TeV

<u>Mode</u>	<u>Fraction (<math>\Gamma_i/\Gamma</math>)</u>
$\Gamma_1$ $J/\psi p$	seen

 **$P_c(4450)^+$  BRANCHING RATIOS**

<u><math>\Gamma(J/\psi p)/\Gamma_{\text{total}}</math></u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>	<u><math>\Gamma_1/\Gamma</math></u>
<b>seen</b>	AAIJ	15P	LHCB $pp$ at 7, 8 TeV	

AAIJ      15P    PRL 115 072001      R. Aaij *et al.*      (LHCb Collab.)