

1 Supplementary Material for PAPER-2018-036

The following plots show fits to $J/\psi \pi^- \pi^0$ and $\pi^+ \gamma \gamma$ invariant mass distributions.

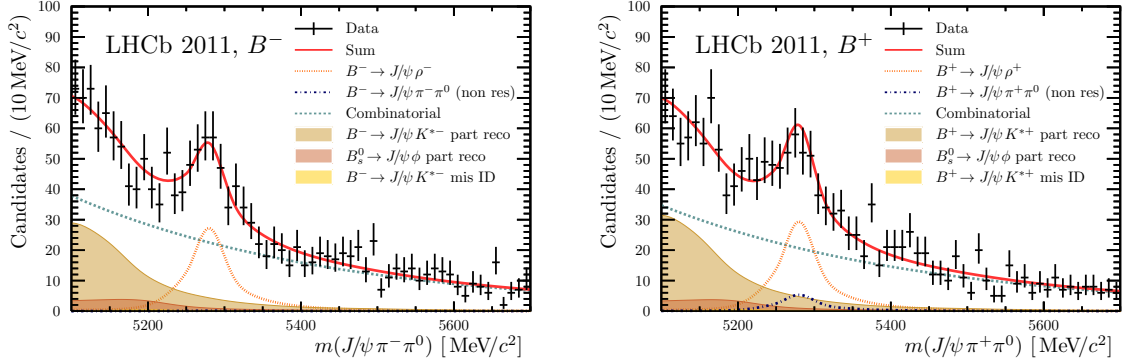


Figure 1: The (left) $J/\psi \pi^- \pi^0$ and (right) $J/\psi \pi^+ \pi^0$ invariant mass distributions in the 2011 data set.

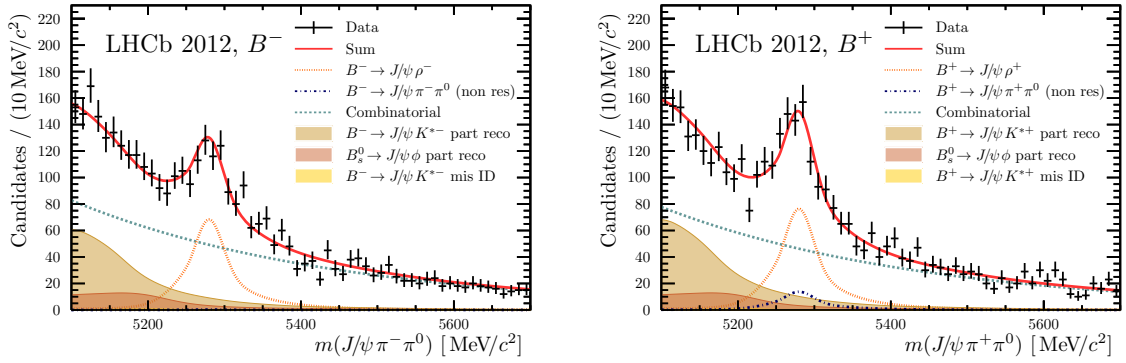


Figure 2: The (left) $J/\psi \pi^- \pi^0$ and (right) $J/\psi \pi^+ \pi^0$ invariant mass distributions in the 2012 data set.

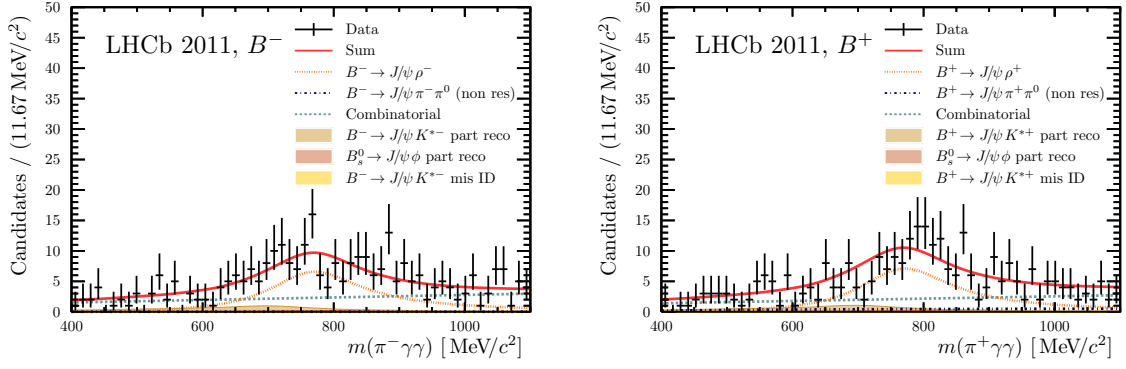


Figure 3: The (left) $\pi^-\gamma\gamma$ and (right) $\pi^+\gamma\gamma$ invariant mass distributions in the 2011 data set for $m_{J/\psi\pi^+\pi^0}$ between $5250 \text{ MeV}/c^2$ and $5310 \text{ MeV}/c^2$.

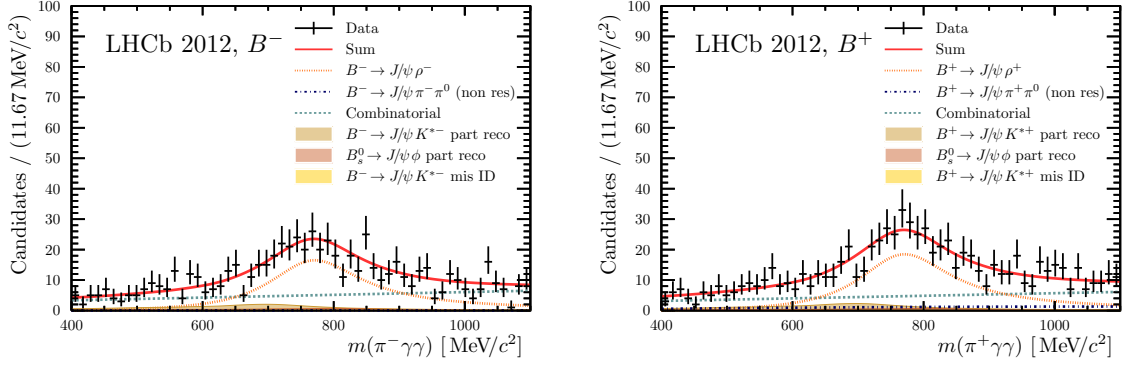


Figure 4: The (left) $\pi^-\gamma\gamma$ and (right) $\pi^+\gamma\gamma$ invariant mass distributions in the 2012 data set for $m_{J/\psi\pi^+\pi^0}$ between $5250 \text{ MeV}/c^2$ and $5310 \text{ MeV}/c^2$.

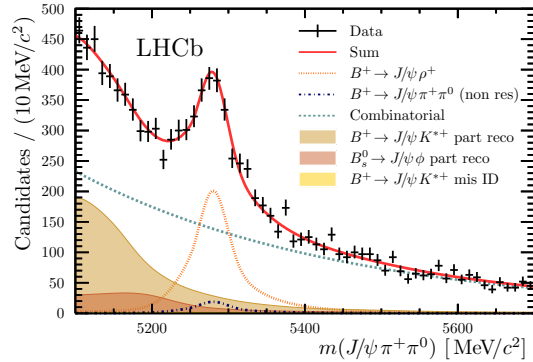


Figure 5: The (left) $J/\psi\pi^+\pi^0$ invariant mass distribution in the combined 2011 and 2012 data set.

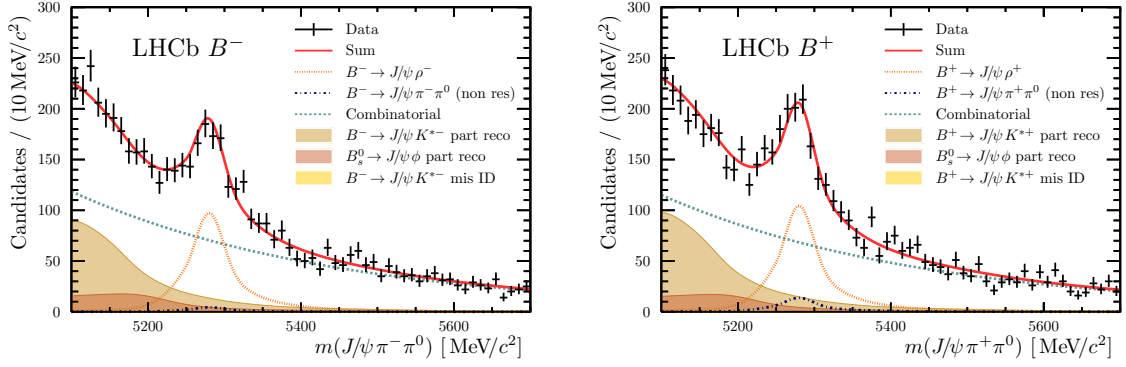


Figure 6: The (left) $J/\psi \pi^- \pi^0$ and (right) $J/\psi \pi^+ \pi^0$ invariant mass distributions in the combined 2011 and 2012 data set.

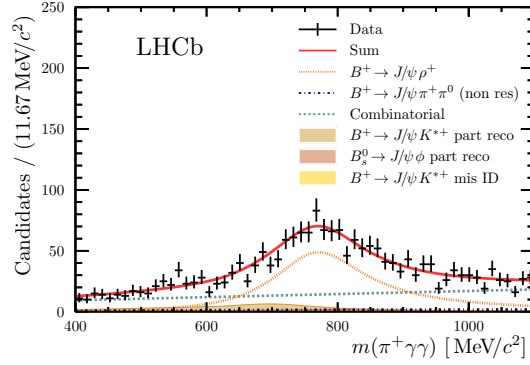


Figure 7: The $\pi^+ \gamma \gamma$ invariant mass distribution in the combined 2011 and 2012 data set for $m_{J/\psi \pi^+ \pi^0}$ between 5250 MeV/c² and 5310 MeV/c².

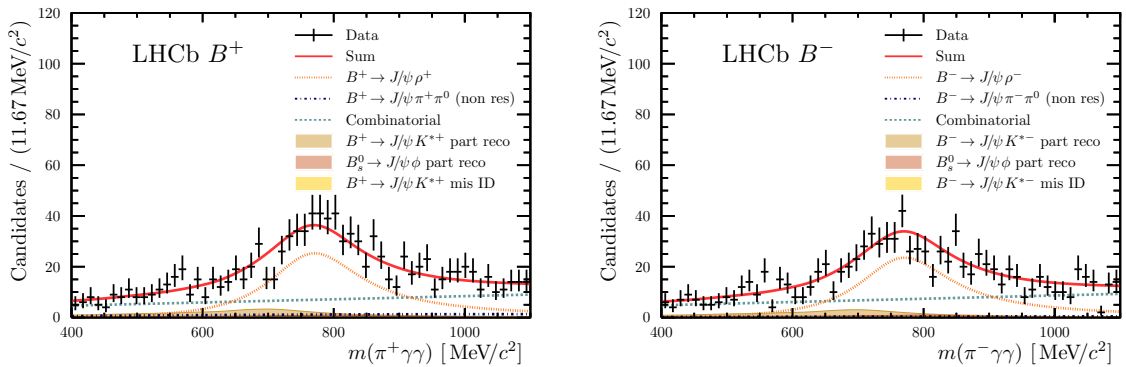


Figure 8: The (left) $\pi^- \gamma \gamma$ and (right) $\pi^+ \gamma \gamma$ invariant mass distributions in the combined 2011 and 2012 data set for $m_{J/\psi \pi^+ \pi^0}$ between 5250 MeV/c² and 5310 MeV/c².