

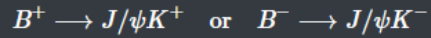
Graphics and Programming

Of our works

CPPM Marseille

Mission 8: decay of a B^+ to a J/ψ and a charged kaon

Plot the mass distribution of a charged B meson which decays to a combination of J/ψ and K^+



You will find a peak at $5.28 \text{ GeV}/c^2$, which is exactly the mass of the B^+ .

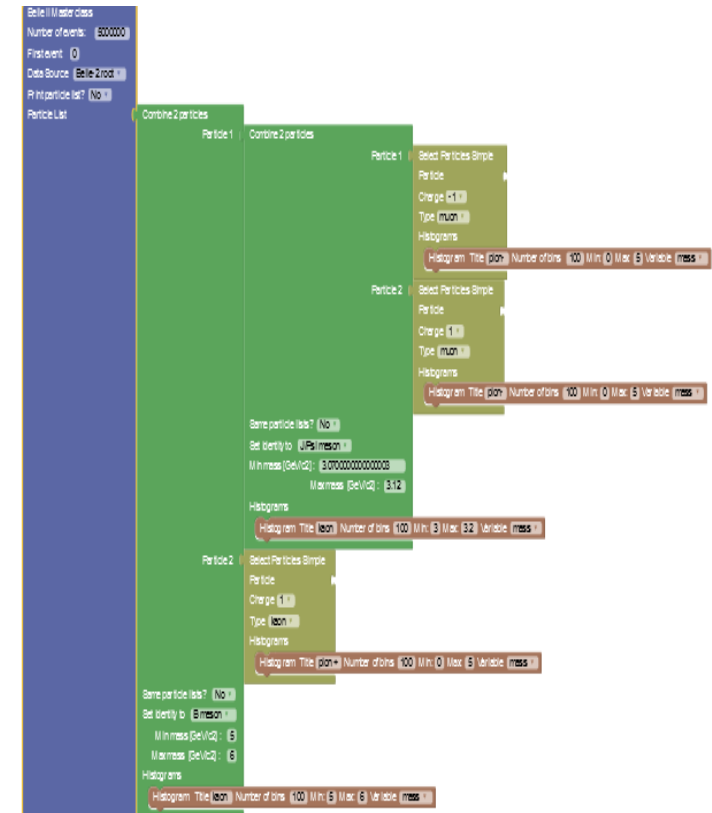
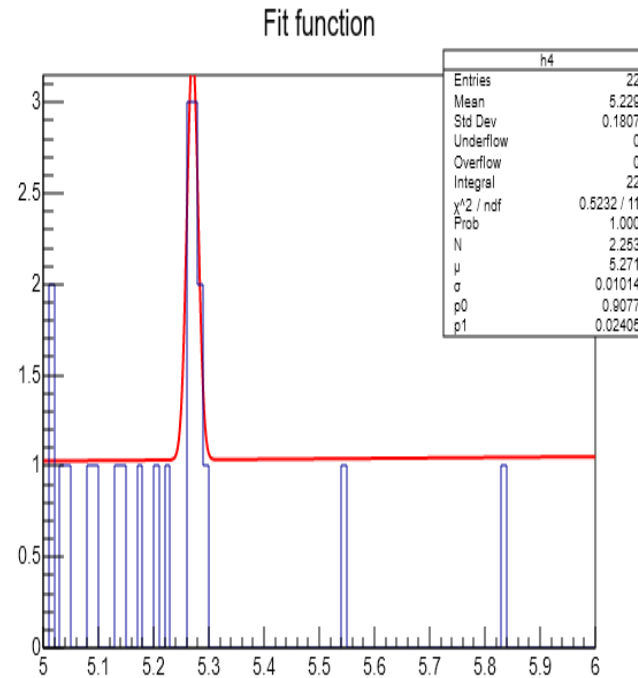
Use the green block "Combine two particles" and describe the process in two stages.

Be sure to select only the particles with an invariant mass very close to the J/ψ mass for further analysis.

mission: 8
level: beginner
particle: B
charge: +
mass: 5.271
width: 0.01
events: 5

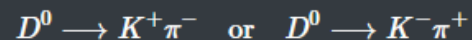
Show diagram

Delete this mission



Mission 9: decay of a D^{*+} to a D^0 and a charged pion

Plot the mass distribution of a charged D^* which decays to a combination of $D^0\pi^-$ or $D^0\pi^+$:



You will find a peak in the D^{*+} mass distribution at at $2.01 \text{ GeV}/c^2$.

Use the green block "Combine two particles" and describe the process in two stages.

Be sure to select only the particles with an invariant mass very close to the D^0 mass for further analysis.

Mission: 9
Level: beginner
Particle: D^*
Charge: +
Mass: 2.005
Width: $5.279e-4$
Events: 20

Show diagram

Delete this mission

