

Belle II international masterclasses

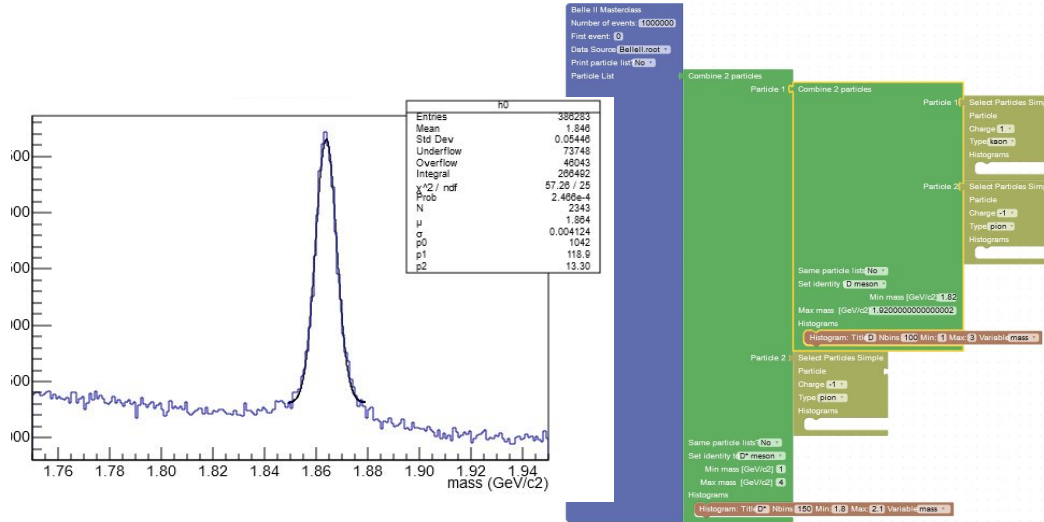
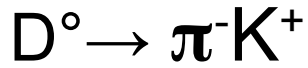
IPHC Strasbourg

11 March 2025

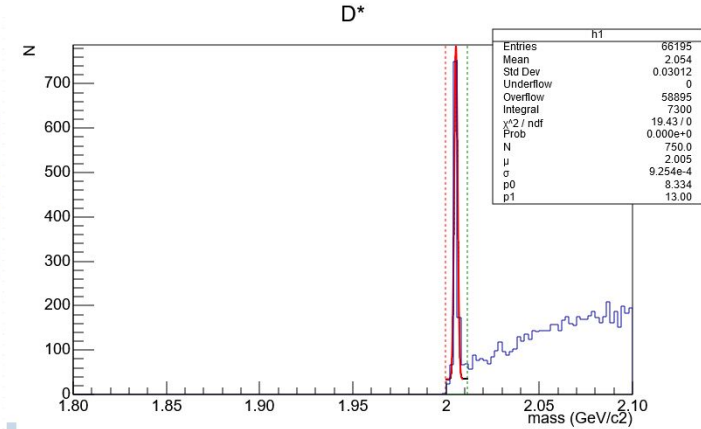
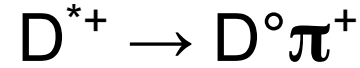


Our School 🏠 : Collège épiscopal Saint Etienne





Measured D^0 mass: ~ 1.86 GeV
 Actual mass: 1.86 GeV



Click to fit Visualize functions

range: min = 1.99, max = 2.01

$\chi^2/ndf = 37.04 / 1 = 37.04$ || $N_{Gauss} = 845$ || $N_{poly} = 206$

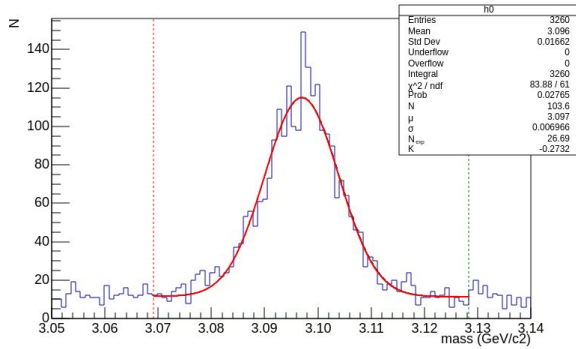
Function: Gauss Poly Exp Breit-Wigner Power

$$N \cdot e^{-\frac{1}{2} \left(\frac{x-\mu}{\sigma} \right)^2} + p_0 + p_1 \cdot x$$

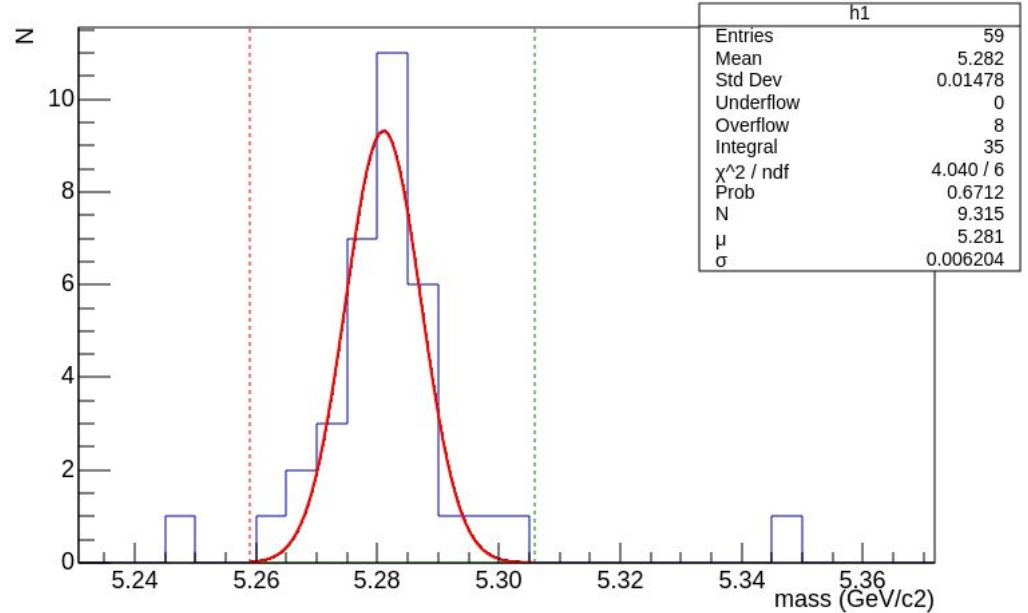
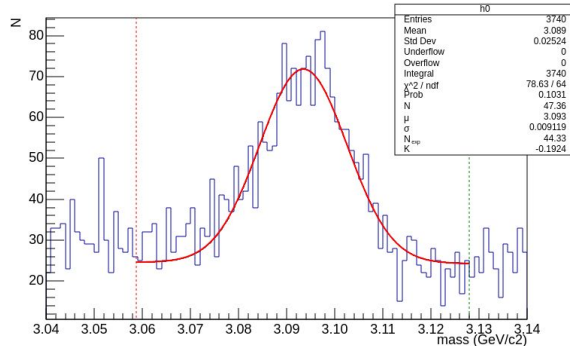
Measured D^* mass: ~ 2.054 GeV
 Actual mass: 2.010 GeV

$B^+ \rightarrow J/\psi K^+$

$J/\psi \rightarrow \mu^+\mu^-$



$J/\psi \rightarrow e^+e^-$



Measured B^+ mass: ~ 5.28 GeV

Actual mass: 5.28 GeV