

Hints for fitting background / signal

Adding all 7 histogram files corresponding to the Ks

histogram range : 0.2 - 0.7 (200 bins)

background fit range : 0.3 - 0.7

signal fit range : 0.48 - 0.51

result

signal : 198 Ks with mean 495.89 and sigma 3.99
(total 236 -background 38)

Adding all histogram files corresponding to the Lambdas and antiLambdas together

histogram range : 0.9 - 1.9 (400 bins)

background fit range: 1.1 - 1.9

signal fit range : 1.1 - 1.14

result

signal : 144 Lambda/antiLambda with mean 1115.47 and sigma 1.81
(total 263 - background 119)

Histogram for Ks from 1562 lead-lead events (data sample number 3)

high background

background fit range : 0.310 - 0.700

signal fit range : 0.482 - 0.510

signal 82 Ks (total 722 - background 641) with mean 495.57 and sigma = 3.5