Fluka Charm Production

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Compare Fluka w E872 MC

- "Standard" Fluka of 2M 800 GeV protons
  - Print out ID code, energy and angle of charm particles
- Print out same information for E872MC neutrino generator
- Convert to ntuple and compare
- See d0dk.ps, dsdk.ps

Charm Rates

	Fluka Number	Fluka Rate (E-3/PoT)	Combined rate (E-3/PoT)	Reinhard Thesis (E-3/PoT)
D+	2189	1.1		
D-	3091	1.5	2.6	1.4
D0	4568	2.3		
D0 Bar	7102	3.6	5.8	3.3
Ds	1363	0.68	0.68	0.63

Energy and production angle

	Fluka Energy	E872 MC Energy	Fluka theta	E872 MC theta
D+-/D0	39	57	0.051	0.020
Ds	44	66	0.043	0.022

- No 2ndry charm in E872 MC?
  - Expected to be ~6% of primary production
- $(1-x_f)^n$ different?
  - Few GeV change in <E> with 7.4< n <10
- A dependence different?