

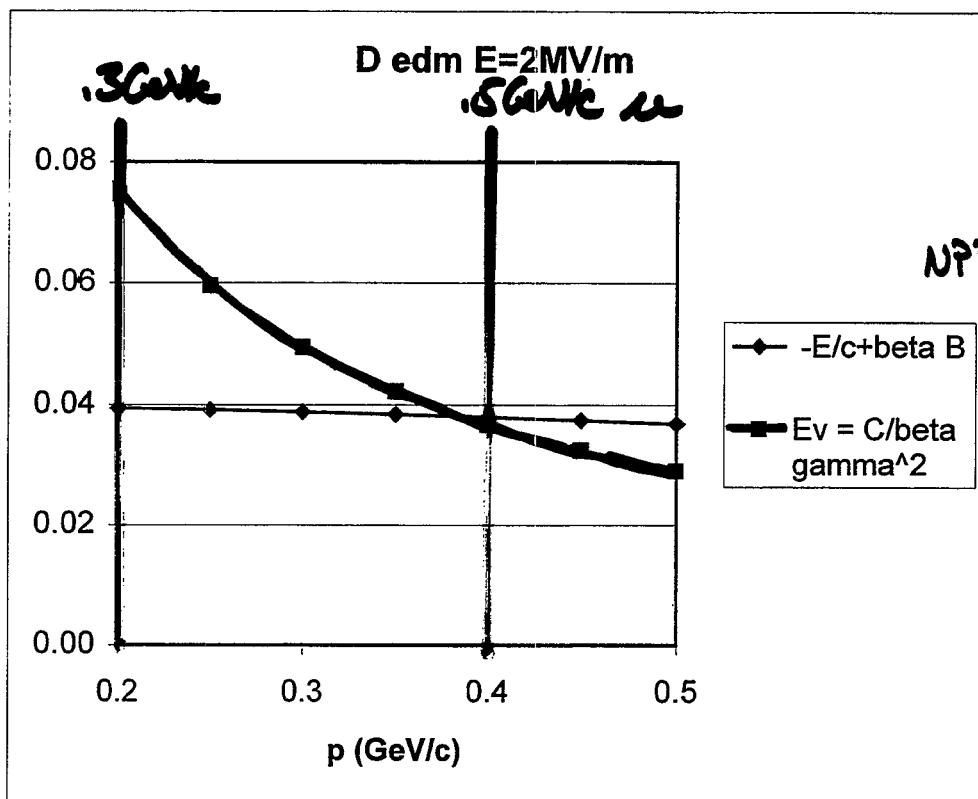
Bill Morse

What is best deuteron p?

$$E = \alpha B c \beta \gamma^2$$

Ring parameters as a function of deuteron momentum for a circular ring.

MV/m	p(GeV/c)	$\beta = pc/E$	$\gamma = E/m$	B (T)	R (m)	$-E/c + \beta \times B$	$E_v = C/\beta\gamma^2$
2	0.1	0.053	1.001	0.874	0.45	0.040	0.187
2	0.15	0.080	1.003	0.582	1.00	0.040	0.125
2	0.2	0.106	1.006	0.435	1.79	0.039	0.093
2	0.25	0.132	1.009	0.347	2.81	0.039	0.074
2	0.3	0.158	1.013	0.288	4.07	0.039	0.062
2	0.35	0.183	1.017	0.246	5.57	0.038	0.053
2	0.4	0.208	1.022	0.214	7.33	0.038	0.046
2	0.45	0.233	1.028	0.189	9.35	0.037	0.041
2	0.5	0.257	1.035	0.169	11.64	0.037	0.036



$$\vartheta_0 = \frac{13.6 MeV}{\beta c p} \sqrt{x/X_0} [1 + 0.038 \ln(x/X_0)]$$

$$\varepsilon_b = \varepsilon_s / \beta \gamma$$

$$p = 0.25644c \quad \theta_0 = 412 \text{ mm} \delta \sqrt{x/x_0}$$