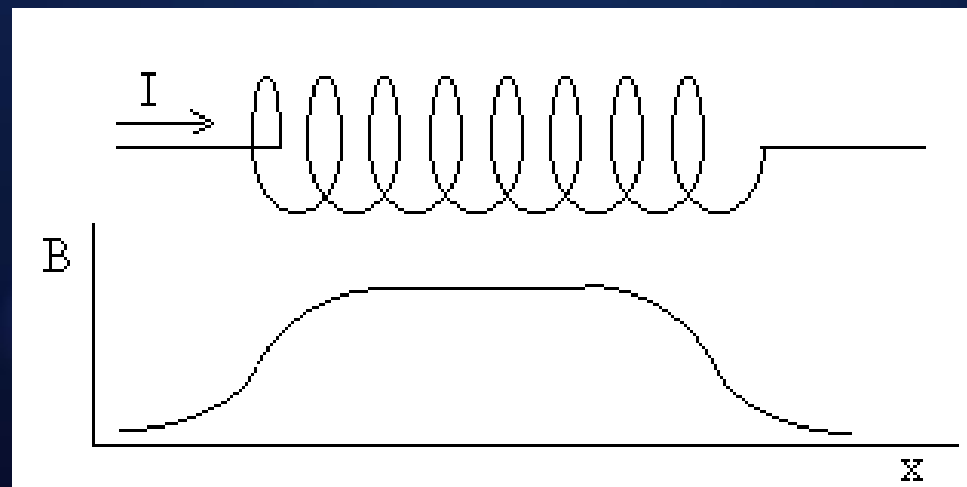
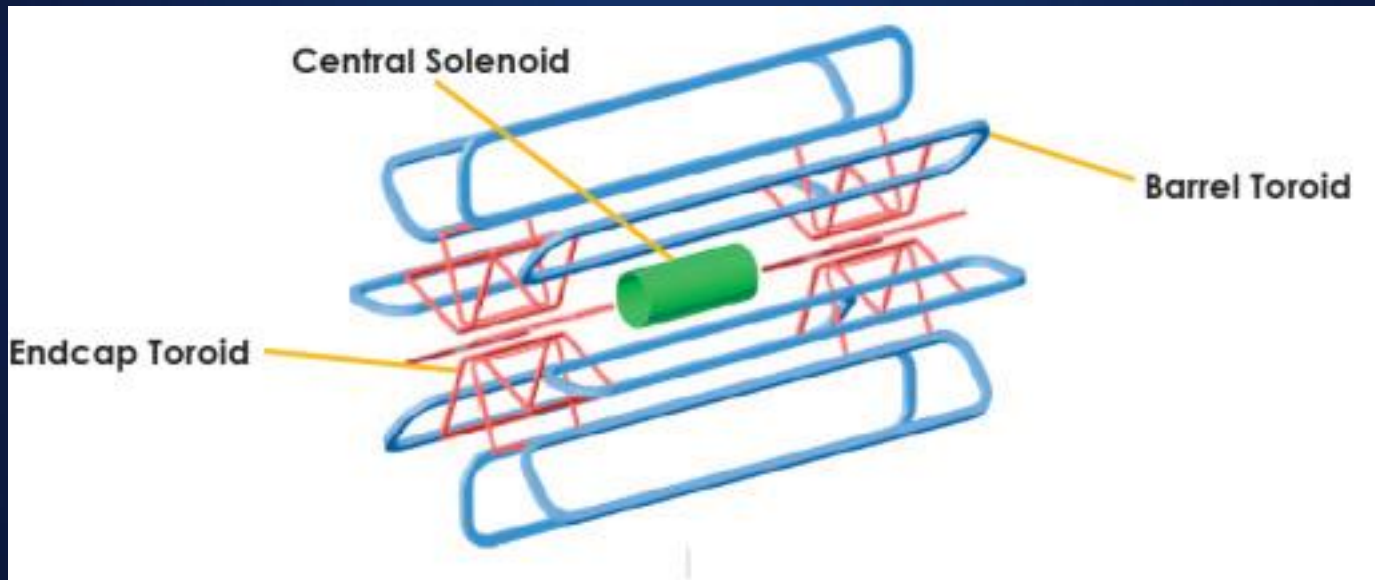
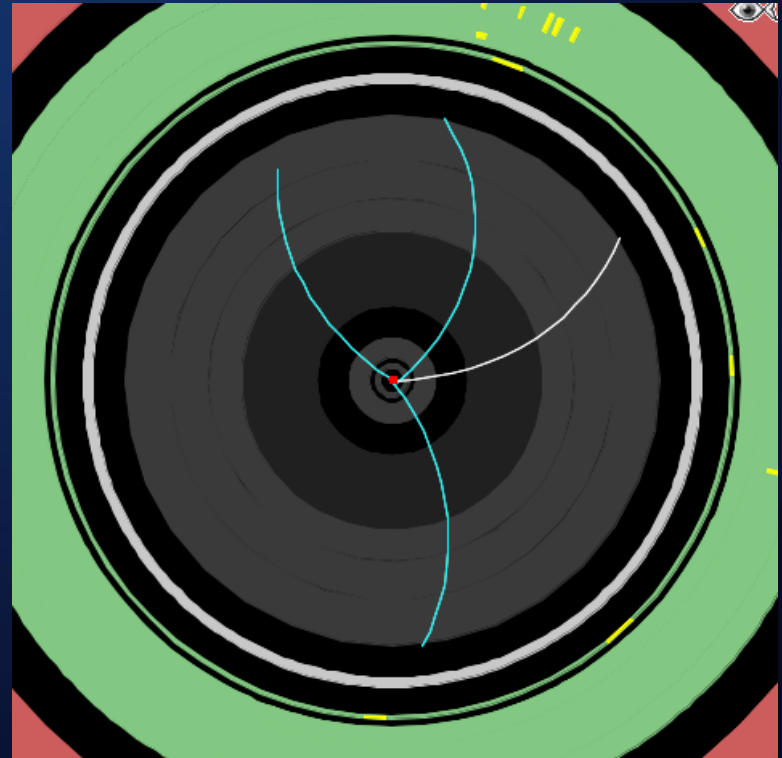


Κίνηση σε μαγνητικό πεδίο



Κίνηση σε μαγνητικό πεδίο

- Δύναμη Lorenz: $F = q * (v \times B)$
- $\frac{m * v_T^2}{R} = q * v_T * B \Rightarrow \frac{p_T}{R} = q * B$
- $q = \pm 1$
- $B(T) = \frac{p_T(GeV/c)}{0,3 * R(m)}$



Κίνηση σε μαγνητικό πεδίο

The screenshot displays the HYPATIA software interface. On the left, a circular detector view shows particle tracks in white and purple. A central menu lists various actions: Import/Export/Clear Invariant Mass Table, Save histograms for p, pT, φ, η, Mee, Mμμ, MII, and MIII, Show Curved Tracks, Start Demo Mode, Options, and About HYPATIA. On the right, a histogram shows the distribution of $m_{\mu\mu}$ [GeV] with 10 entries, a mean of 88.3, and an RMS of 2.4. Below it, a table lists track parameters for selected tracks.

Track	+/-	p [GeV]	p _T [GeV]
Tracks_6	-	1.44	0.51
Tracks_12	-	3.57	0.62
Tracks_15	+	0.72	0.57
Tracks_18	+	0.95	0.60
Tracks_24	-	0.61	0.60
Tracks_27	+	0.52	0.52

Number	Track	Pt [GeV]	B [T]
	Tracks_6	0.51	1.91
	Tracks_15	0.57	2.08
	Tracks_18	0.60	1.90
	Tracks_24	0.60	1.96
	Tracks_27	0.52	2.02