SESSION 7

Force on a moving charge	$\vec{F}_B = q(\vec{v} \times \vec{B})$; zero force on a static charge
Force with both E and B	$\vec{F}_t = q(\vec{E} + \vec{v} \times \vec{B})$
Cyclotron Radius	$R = \frac{mv}{qB} = \frac{mv_\perp}{qB}$
Cyclotron frequency	$f = \frac{qB}{2pm}$ is independent of velocity
Velocity selector	$v = \frac{E}{B}$
Forces on Currents	$d\vec{F} = I(d\vec{l} \times \vec{B})$
Torque on loop	$\vec{t} = (\vec{m} \times \vec{B})$ where μ=N.I.A
Potential Energy	$U = -\vec{m}.\vec{B}$