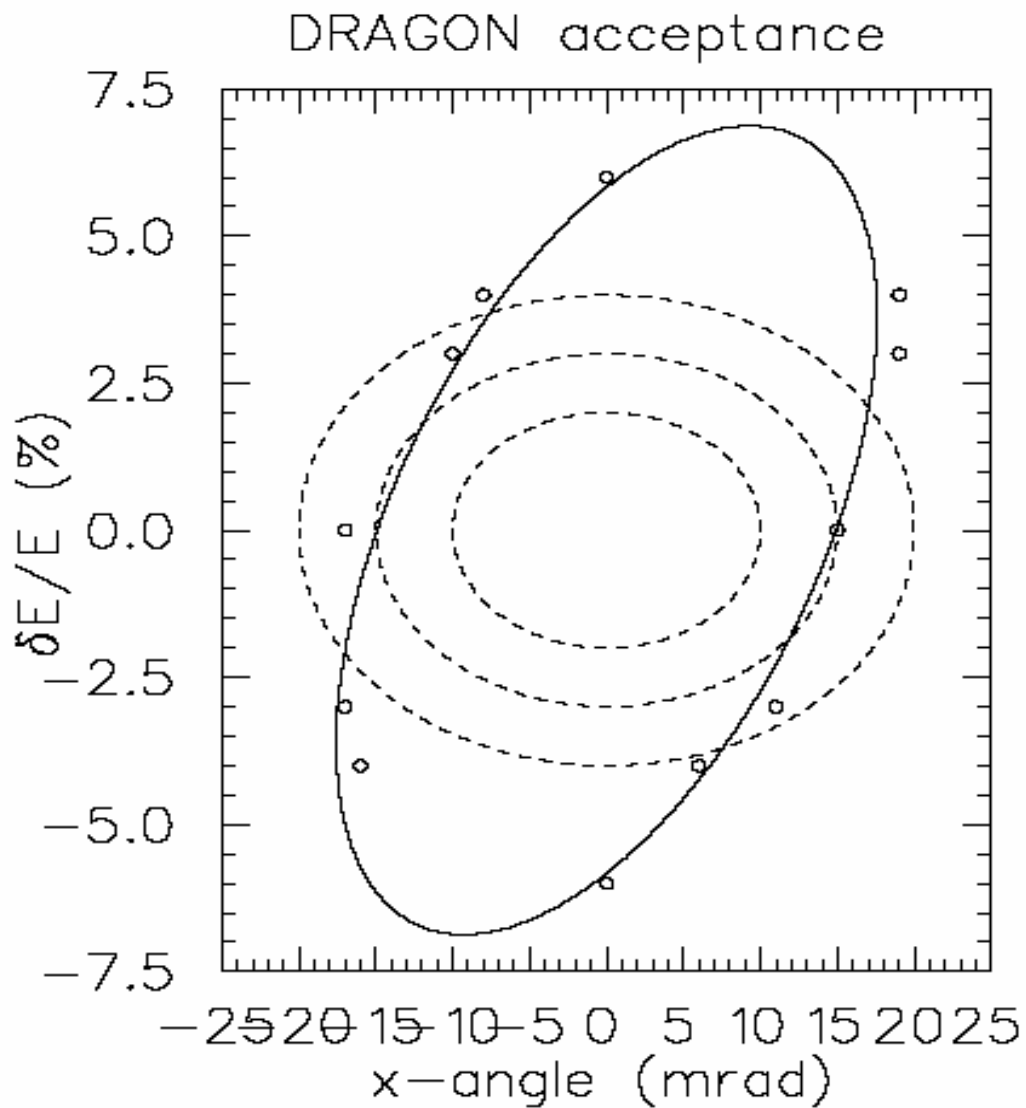


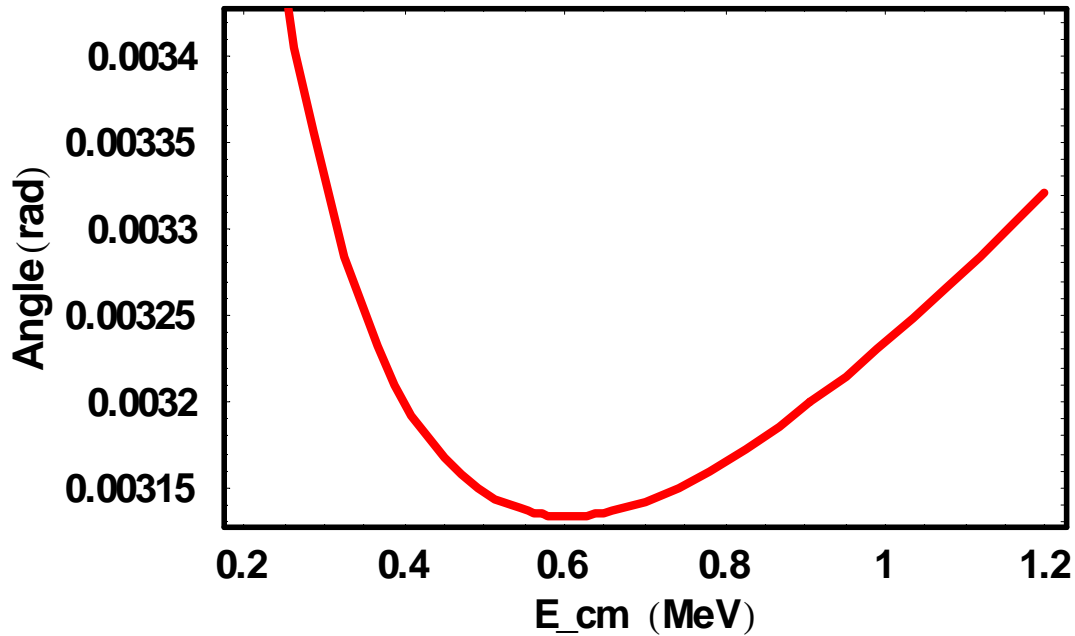
Recoil acceptance of Dragon

The acceptance of recoil particles is limited by its

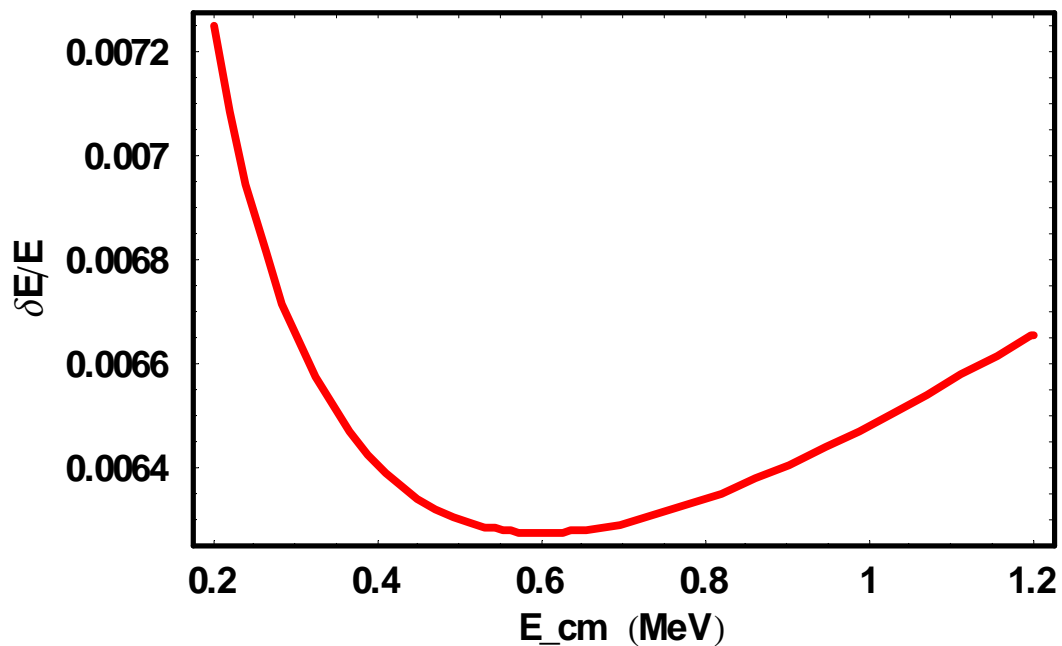
- Emitting angle
- Energy Spread



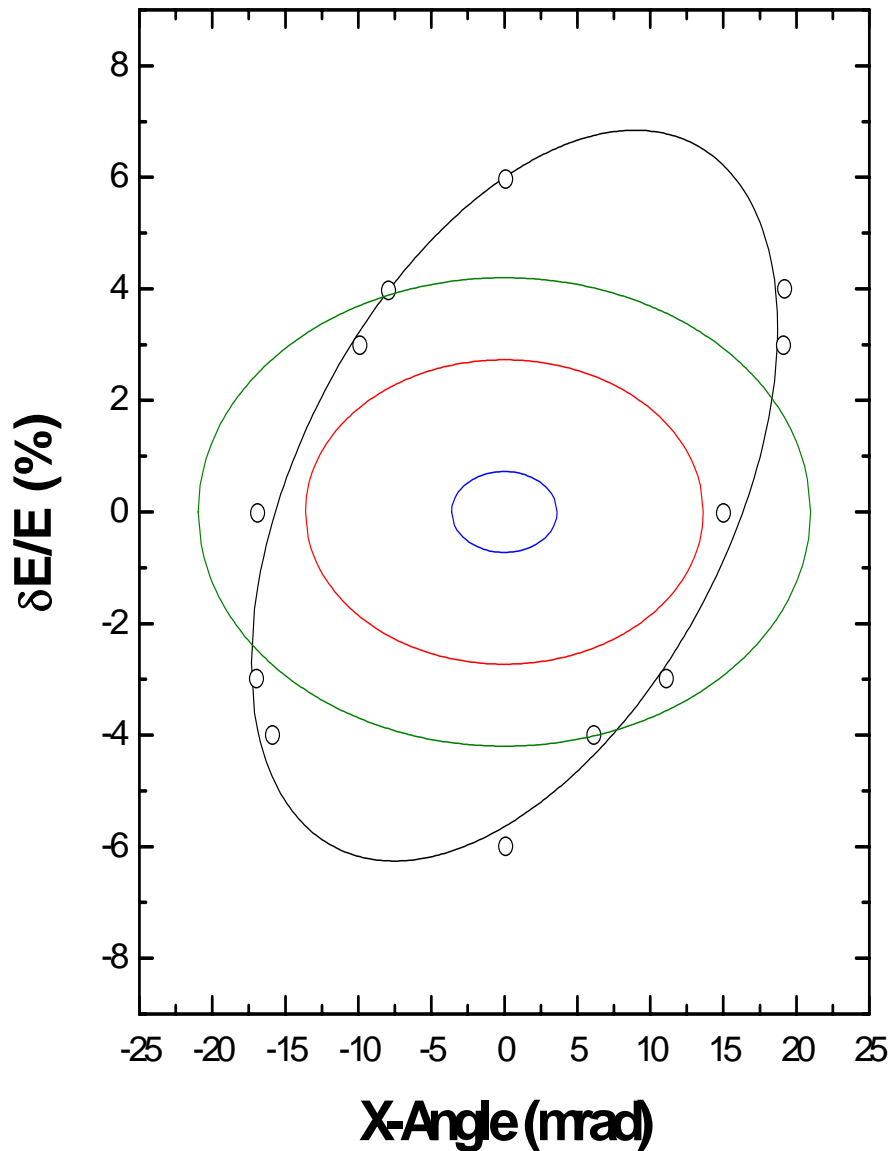
Maximum recoil angles as a function of centre of mass for $^{11}\text{C}(p, \gamma)^{12}\text{N}$ reaction



Maximum relative energy difference as a function of centre of mass for $^{11}\text{C}(p, \gamma)^{12}\text{N}$ reaction



Dragon acceptance analysis for the $^{11}\text{C}(p, \gamma)^{12}\text{N}$ reaction



The ellipses from inside to outside represent:

$^{11}\text{C}(p, \gamma)^{12}\text{N}$ reaction at $E_{\text{cm}} = 0.2$ MeV

$^{21}\text{Na}(p, \gamma)^{22}\text{Mg}$ reaction at $E_{\text{cm}} = 0.205$ MeV (PRL90,2003)

$^{12}\text{C}(\alpha, \gamma)^{16}\text{O}$ reaction at $E_{\text{cm}} = 2.25$ MeV