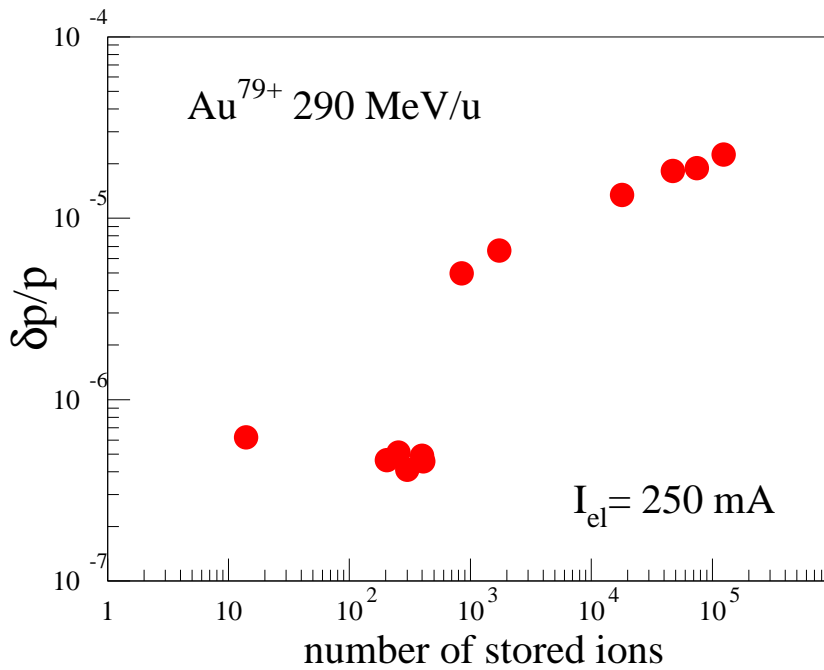
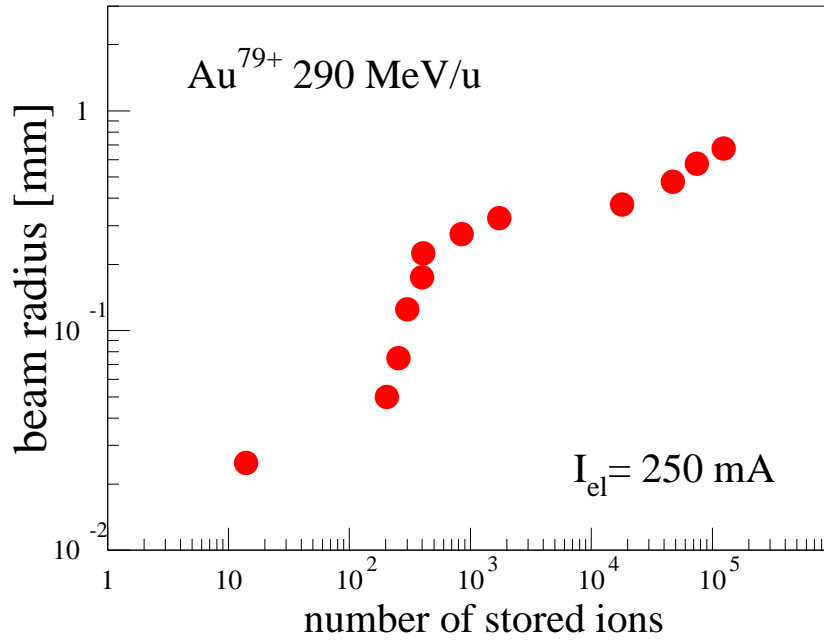


# Beam Radius near Transition Point



Plasma Parameter

$$\Gamma_{\parallel} = \frac{U_{\parallel}}{kT_{\parallel}} = \frac{q^2 e^2 N / 4\pi\epsilon_0 C \gamma}{m_i c^2 \beta^2 (\delta p/p)_{\text{rms}}^2} \simeq \frac{0.06 \text{ meV}}{4 \text{ meV}} \simeq 0.015$$

$$\Gamma_{\perp} = \frac{U_{\perp}}{kT_{\perp}} = \frac{q^2 e^2 / 4\pi\epsilon_0 x_{\text{rms}}}{m_i c^2 \beta^2 \gamma^2 x_{\text{rms}}'^2} \simeq \frac{0.15 \text{ eV}}{0.3 \text{ eV}} \simeq 0.5$$