



Hg Jet Quadrupole Distortions

MERIT Collaboration Meeting

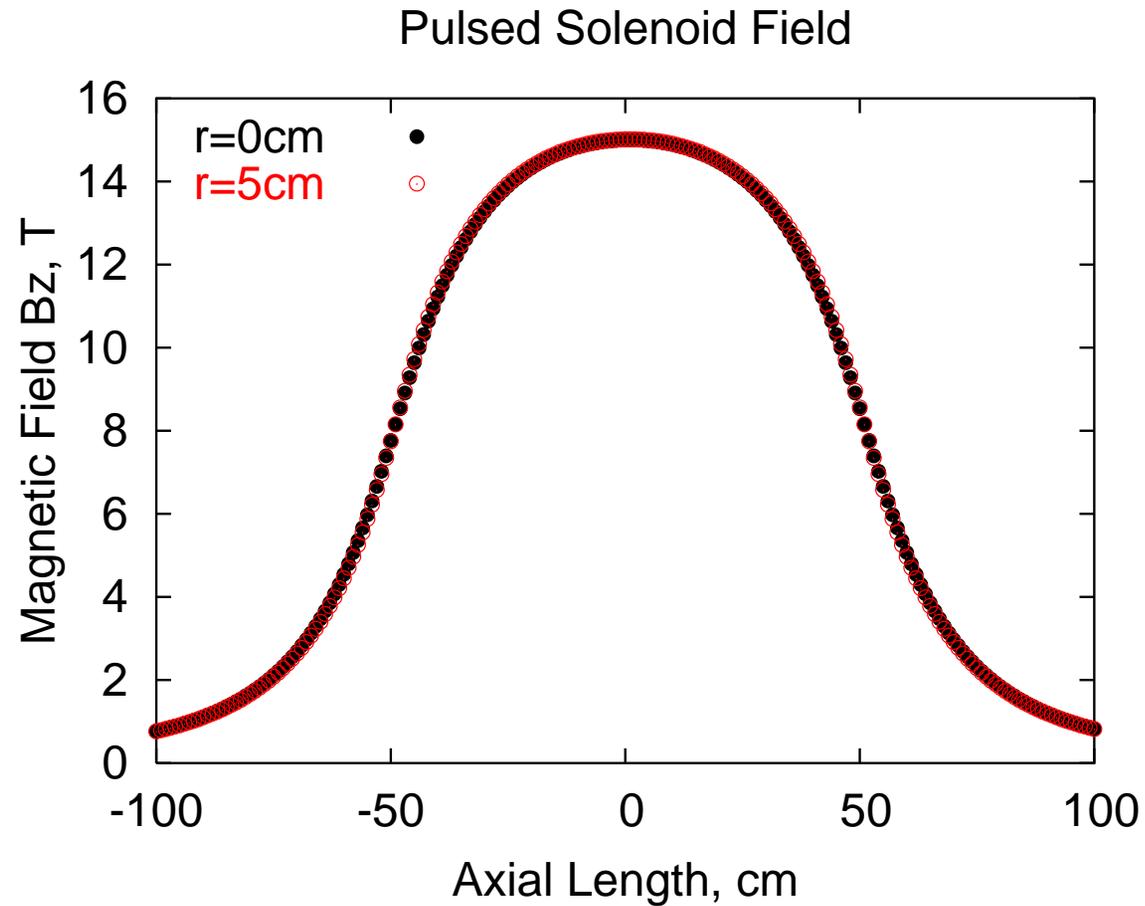
Princeton

November 17, 2005

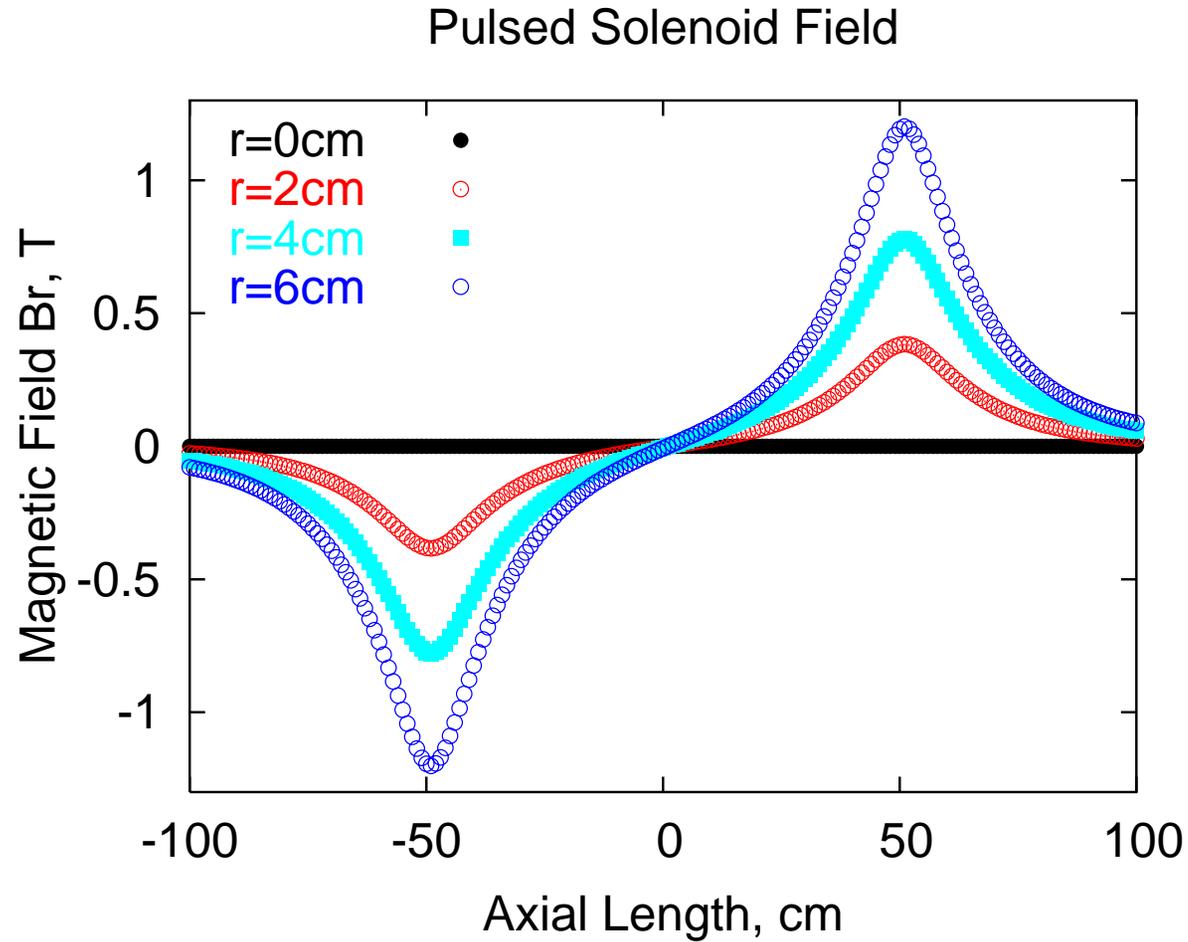


Harold G. Kirk
Brookhaven National Laboratory

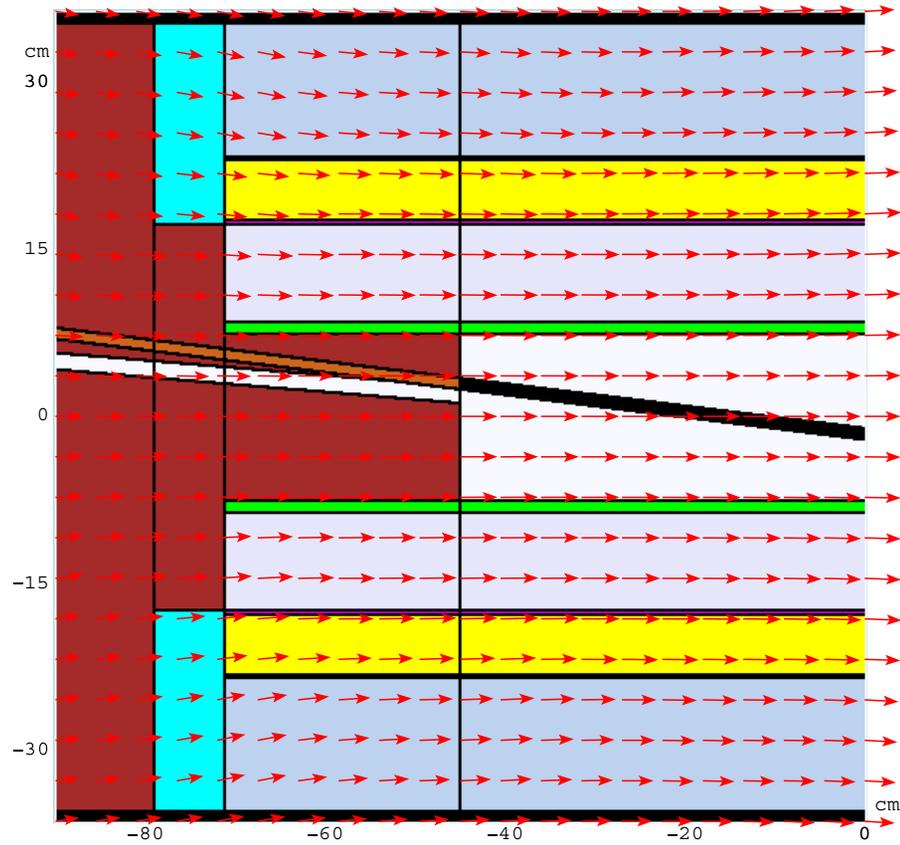
The Pulsed Solenoid Bz Field



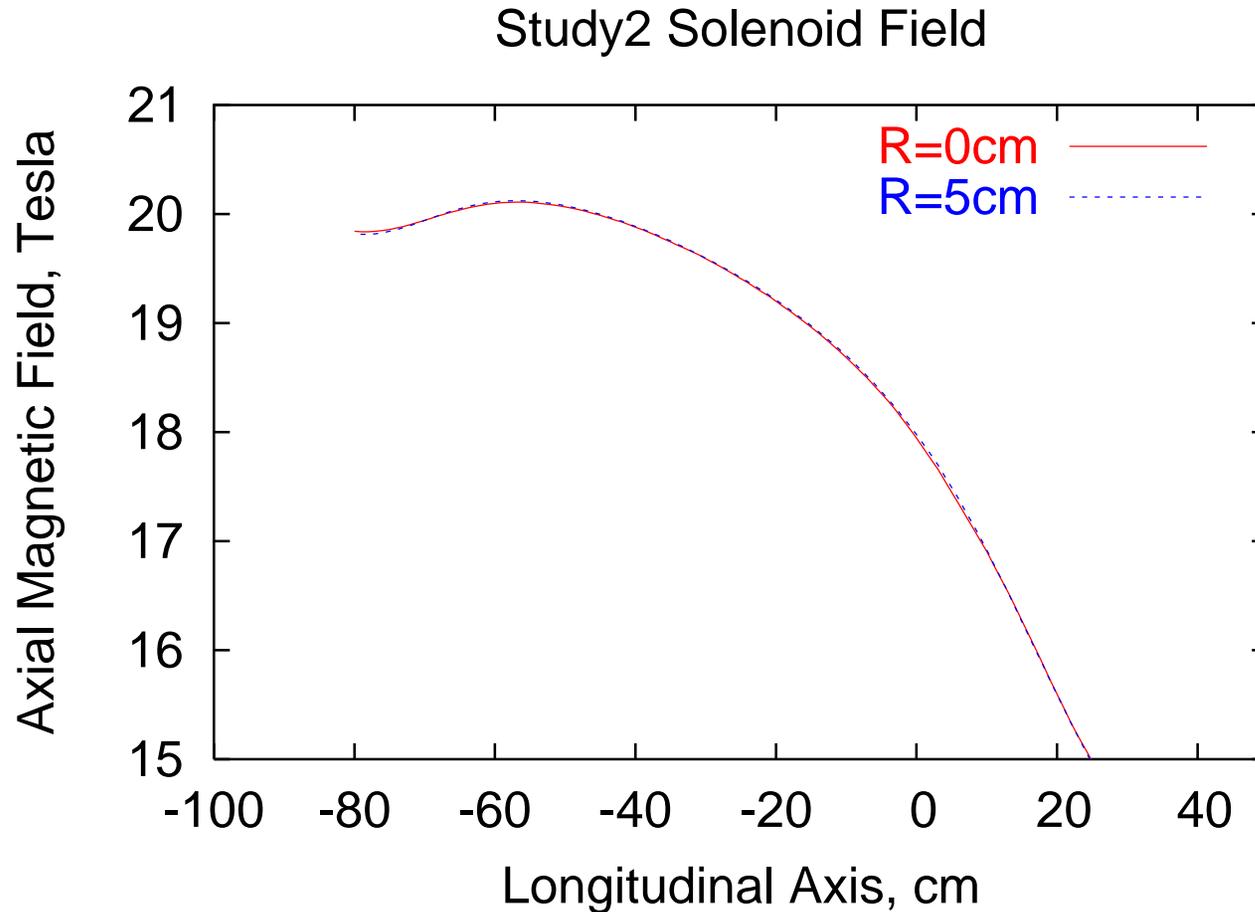
The Pulsed Solenoid Br Field



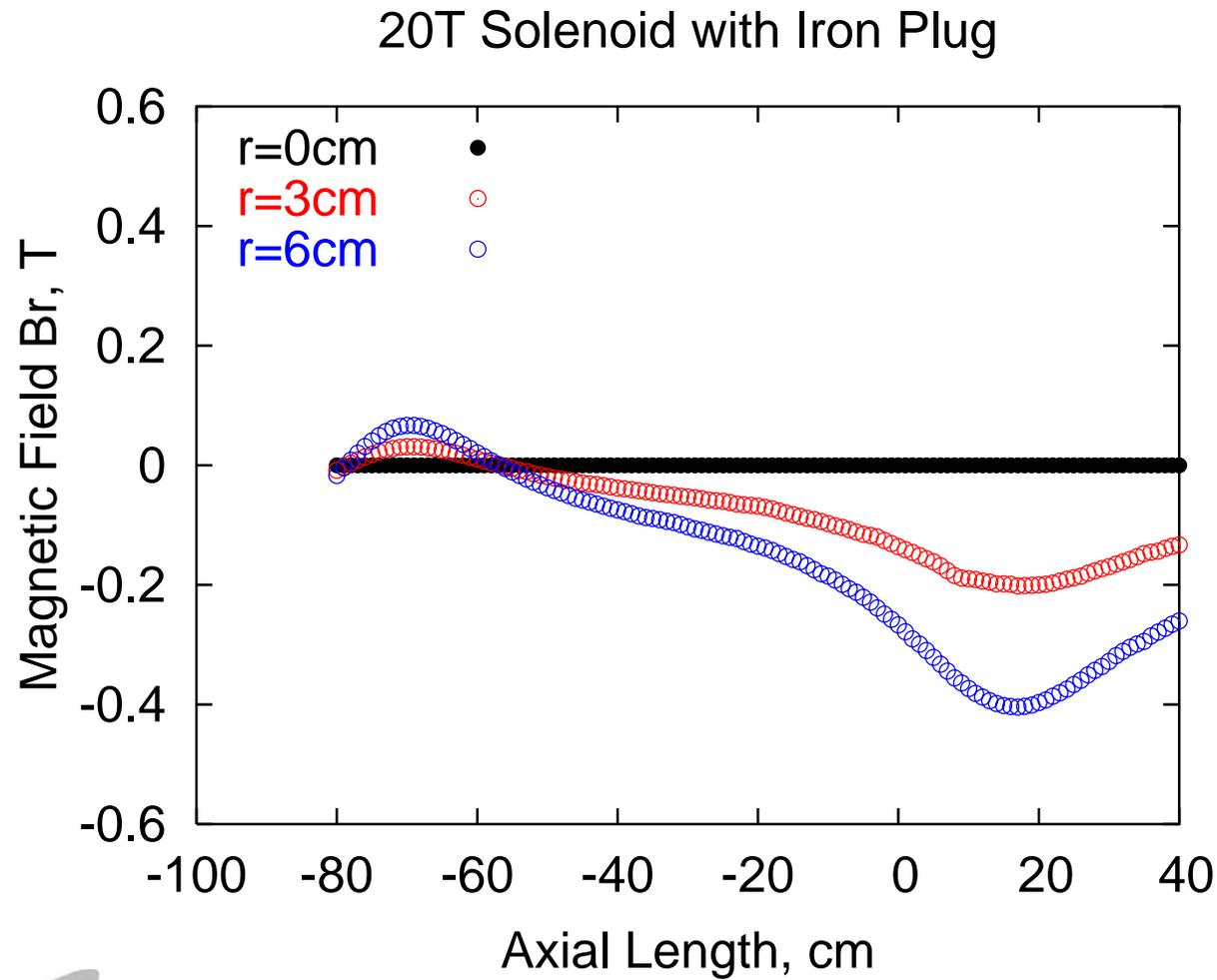
The Study2 Solenoid



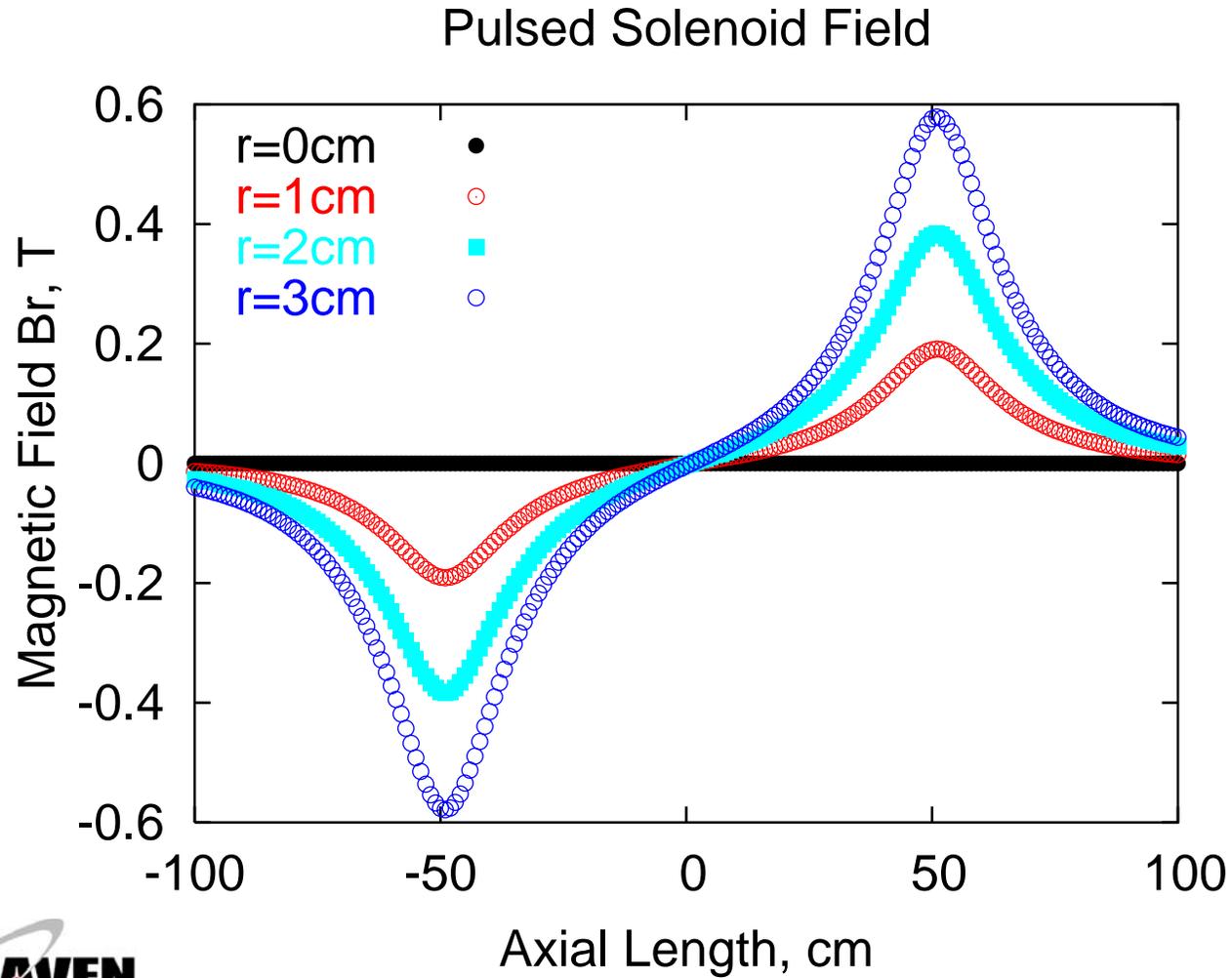
Study2 Solenoid Bz Field



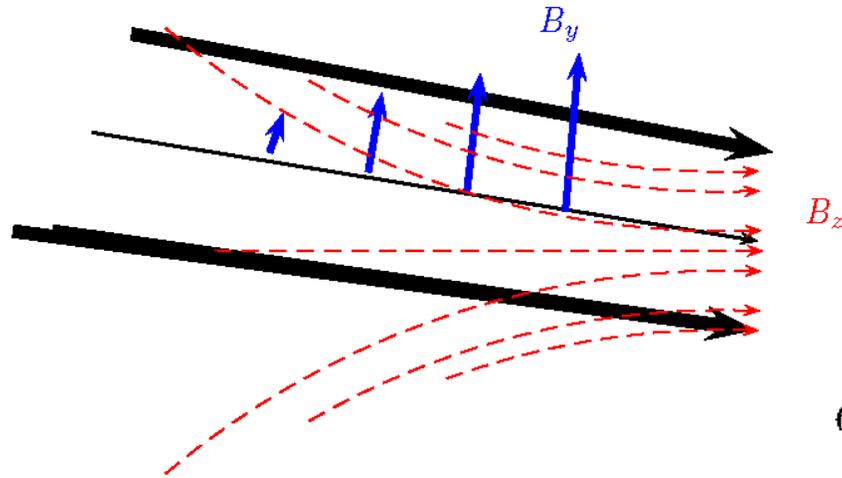
Study2 Solenoid Br Field



The Pulsed Solenoid Br Field

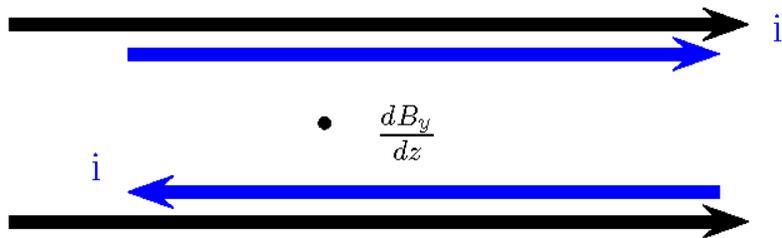


Palmer, et. al MUC242



SIDE VIEW

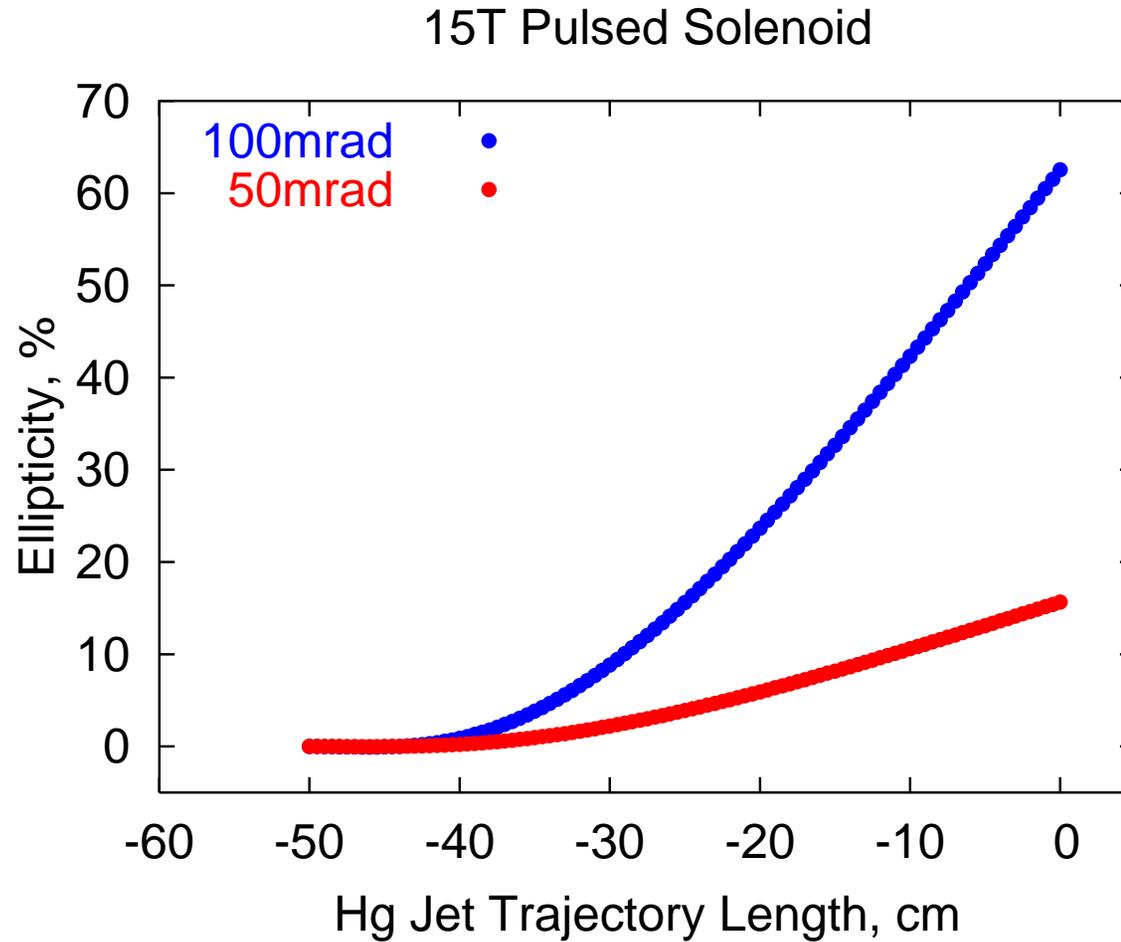
$$\epsilon(z) = \frac{\kappa}{2v\rho} \int \int B_y \frac{\partial B_y}{\partial z} dz^2.$$



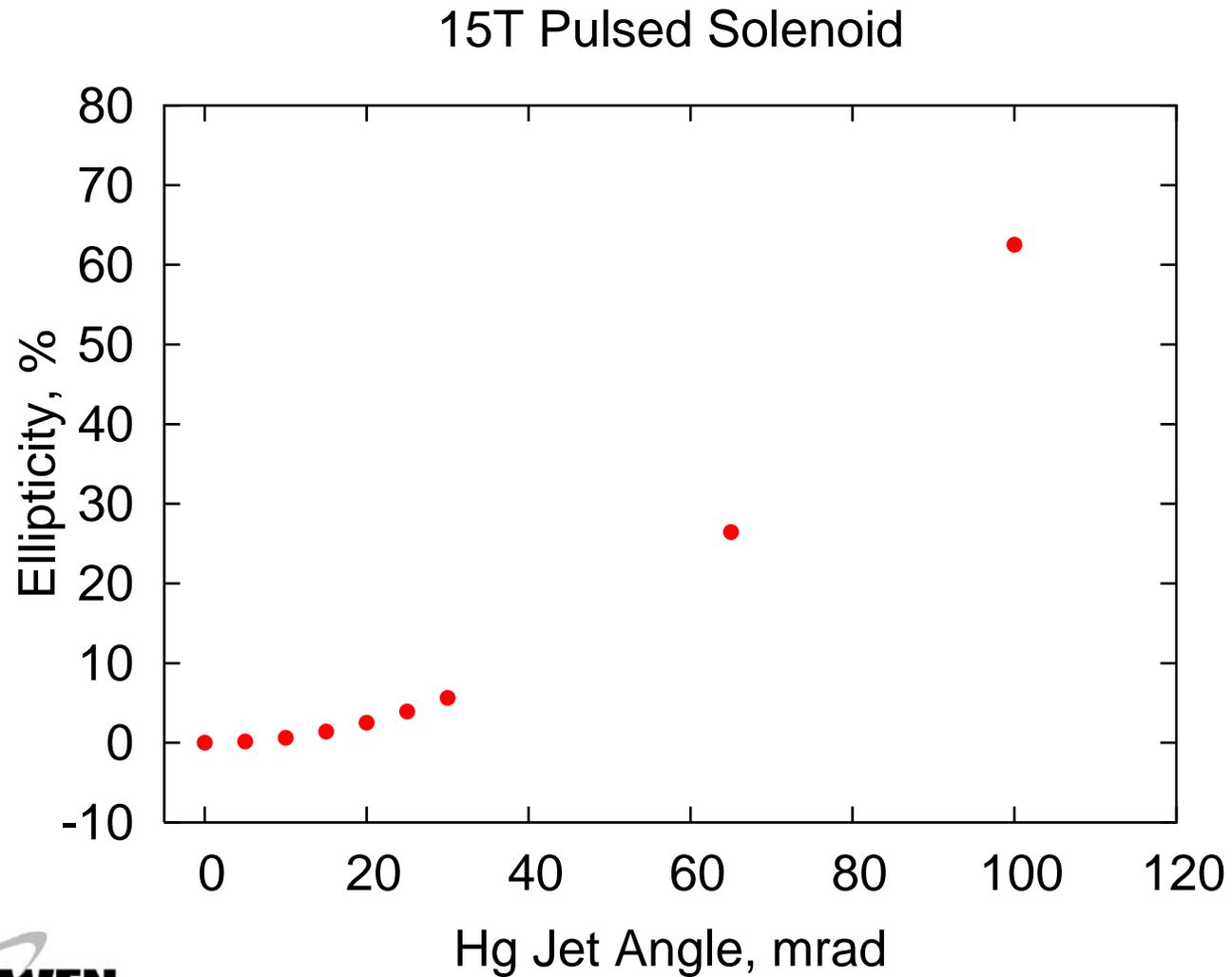
TOP VIEW

Where $\epsilon = \Delta r/r$

Ellipticity along the Hg Jet



Jet Ellipticity at $Z=0$



Hg Jet Ellipticity for Study2 Field

