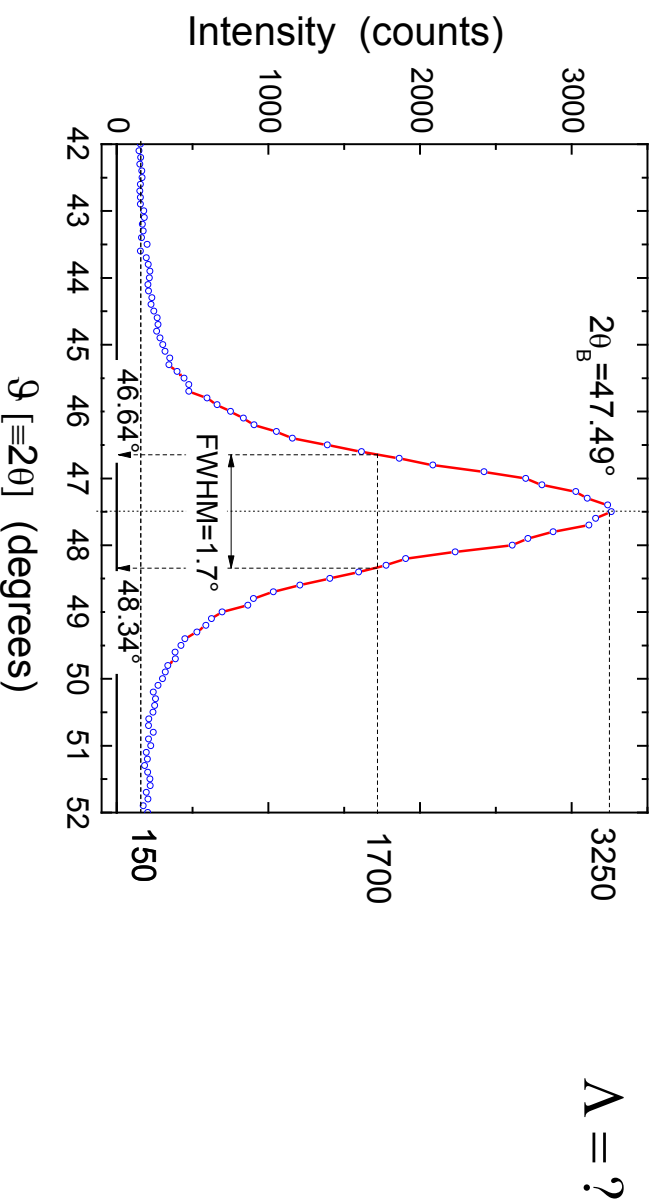




PRACTICE: SCHERRER EQUATION

(220) peak of nanocrystalline CeO_2



$$h = 2 \sqrt{\frac{\ln 2}{\pi}} \frac{\lambda}{\Lambda \cos(\vartheta_B/2)}$$

Λ : effective crystalline domain size (in nm)

h : full width at half maximum (FWHM in radians)

$\lambda = 0.15406$ nm (X-ray wavelength)