

$$\lambda = 2d \sin \theta$$

$$d\left(\frac{\lambda}{2d}\right) = \cos \theta \quad \text{So}$$

$$\text{For Si(331) } d = 15 \text{ keV} \quad \theta_B = 19.373^\circ$$

$$d_{\text{Diamond}} \text{ Si(331)} = 4.6 \text{ } \mu\text{rad}$$

$$\frac{d\left(\frac{\lambda}{2d}\right)}{\sin \theta} = \cos \theta = 0.9434$$

e^- source size

$$\frac{0.28 \text{ mm FWHM}}{10400 \text{ mm}} = 26.9 \text{ } \mu\text{rads}$$

(according to latest cesr lattice)
distance to asym mono (1st) crystal

$$\text{diamond (220) } d = 15 \text{ keV} \Rightarrow \theta_B = 19.13^\circ$$

$$\cos \theta_B = 0.9448 \quad (\text{within } 0.15\% \text{ of Si(331)})$$

$$\alpha = 3.567$$

$$d_{\text{Diamond}} = 1.3566'' = 6.58 \text{ } \mu\text{rads}$$

$\frac{x}{2d}$

example
Spread

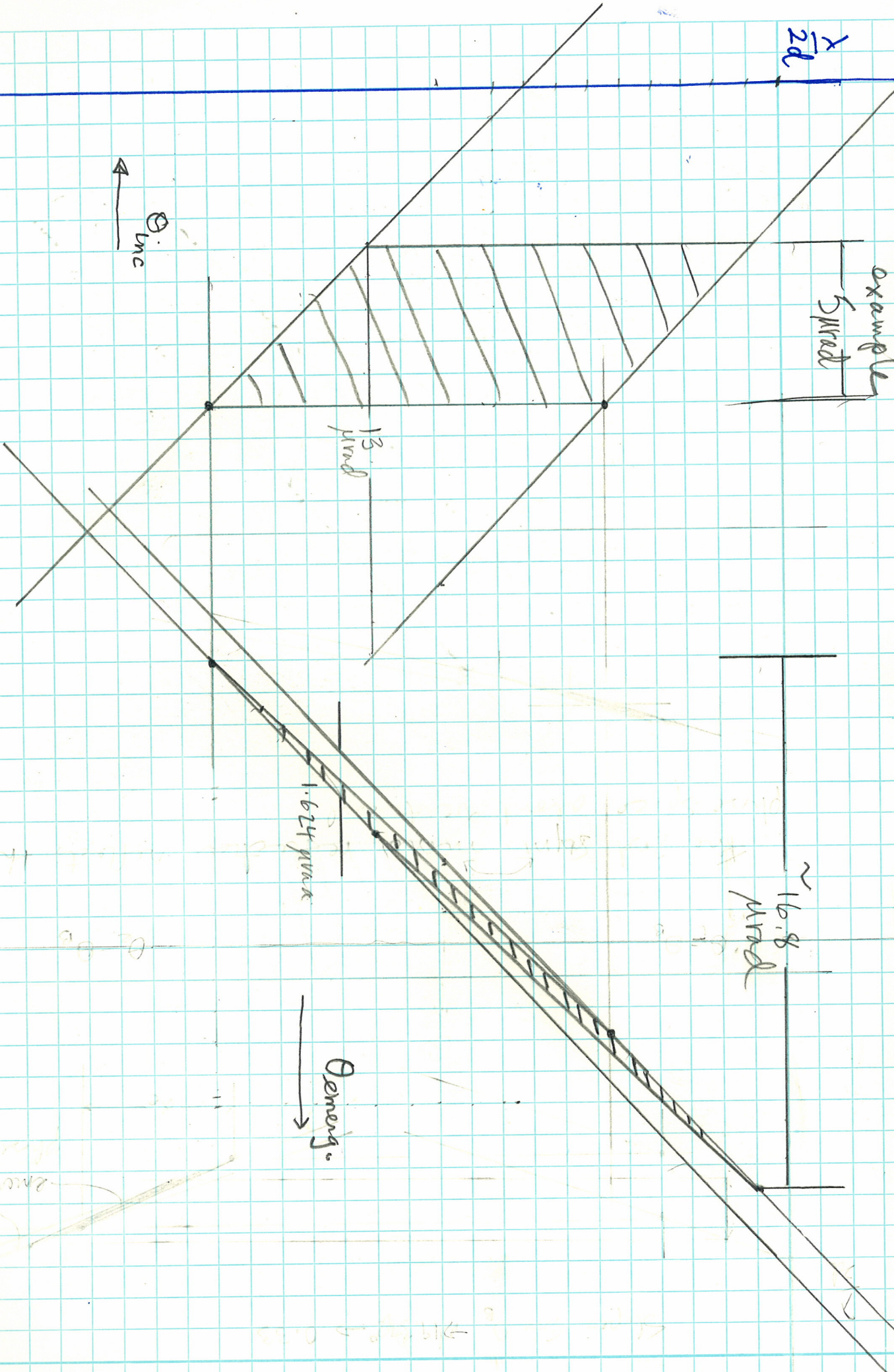
13
mm

1.624
mm

~16.8
mm

Density
→

→
Line



Sym - Sym
(S(331))

