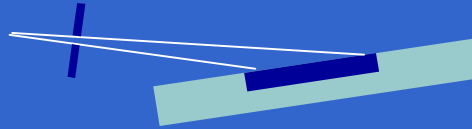


Divergence slits

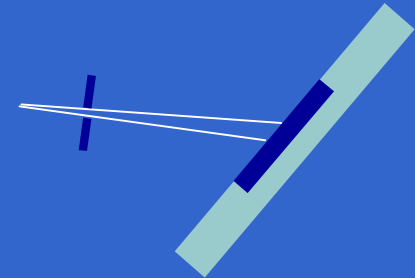
Fixed divergence slit - constant volume



low 2θ

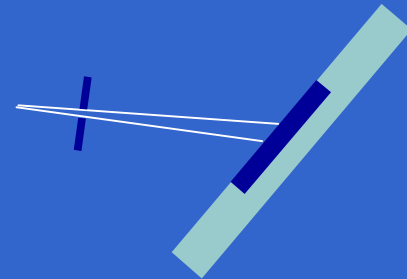
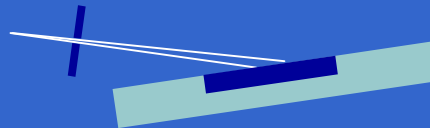


medium 2θ



high 2θ

Variable divergence slit - constant area



Fixed slit vs. variable slit

Intensities are different

Good approximation:

$$I_{\text{fixed slit}} = I_{\text{variable slit}} / \sin \theta$$

Powder diffraction intensity data
conventionally reported as fixed slit data

Always state which type of slit was used