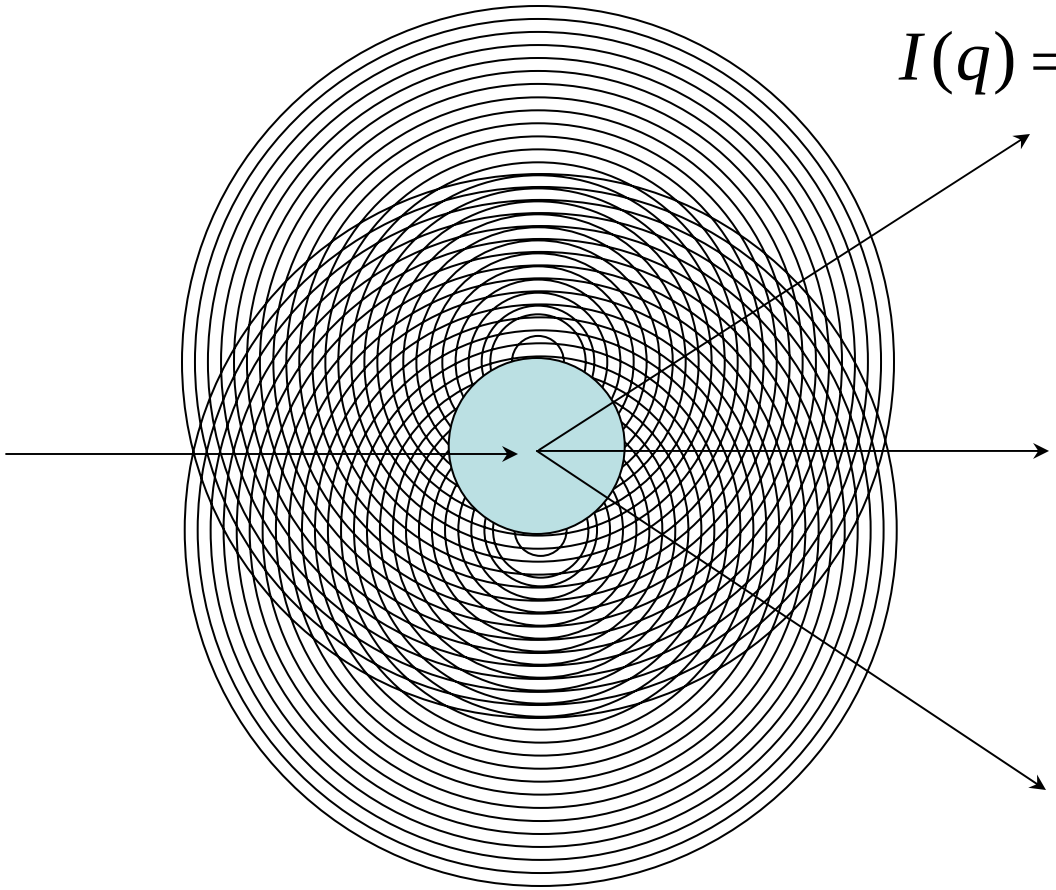
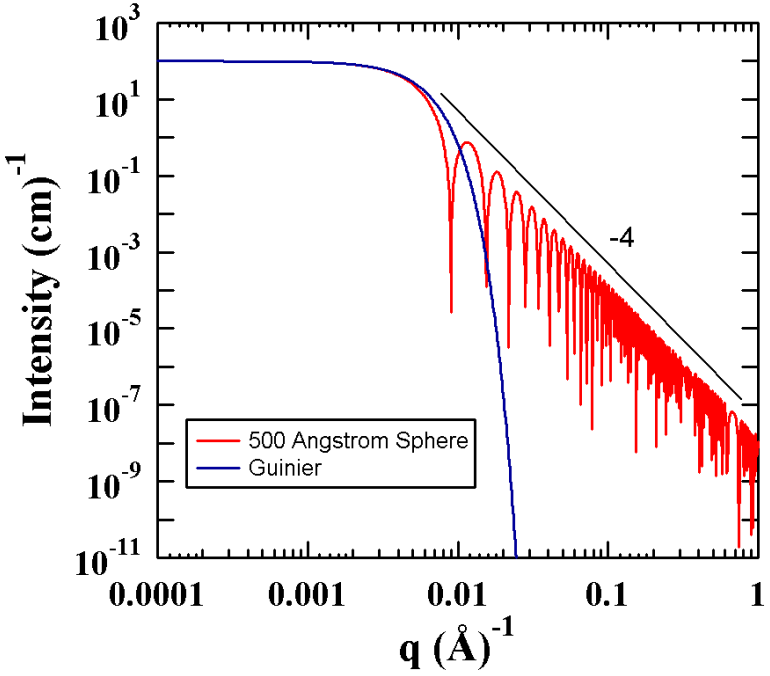
Scattering from Dilute, Perfect, Monodisperse Objects Yields Interference Between Internal Structures (Form Factor)



$$I(q) = Nn^2\left[\frac{\left(3\left(\sin Q - Q\cos Q\right)\right)}{Q^3}\right]^2$$

$$\mathrm{Q} = \mathrm{Rq} = \mathrm{R}\left(\frac{4\pi}{\lambda}\sin\left(\frac{\theta}{2}\right)\right)$$