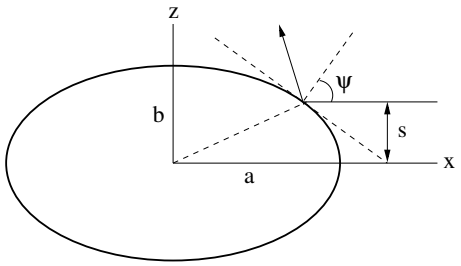
[mex60] Elastic scattering from a hard ellipsoid

Show that the cross section for elastic scattering from a hard ellipsoid described by the equation $x^2/a^2 + (y^2 + z^2)/b^2 = 1$ with the incident beam along the x-axis is

$$\sigma(\theta) = \frac{1}{4}b^2 \frac{a^2 b^2}{[a^2 \sin^2(\theta/2) + b^2 \cos^2(\theta/2)]^2}.$$



Solution: