Homework 03

Variation of p⊥ and p∥ along a field line with a loss cone.

(a) Find loss cone angle. Start with $\mu = mv_\perp^2/2B = const$, $v_\perp^2 + v_\parallel^2 = v^2 = const.$ and show that for the loss cone α: $\sin^2 \alpha = B/Bi$, where Bi is the field strength in the ionosphere.

Bibliography