

ABSTRACT

Many tokamak discharges have beta poloidal (β_p) near unity, *i.e.*, the poloidal currents are relatively small. It is shown that the assumptions of conservation of the total canonical angular momentum of electrons and that the plasma will attain a configuration of minimum magnetic field energy lead to $\beta_p = 1$ equilibria. This result is used for a possible interpretation of recently obtained tokamak discharges with current holes.