998-46-141   **Cesar L Garcia*** (`clgarcia@itam.mx`), Rio Hondo # 1, Tizapan San Angel, 01000 Mexico city, Mexico. *Asymptotic Uniform Convexity and Smoothness on Banach Spaces.*

We discuss the notions of Asymptotic Uniform Convexity (AUC) and Smoothness (AUS) on Banach spaces. It is well known that superreflexive Banach spaces are those that admit an equivalent uniformly convex norm (P. Enflo). Moreover, a renorming of superreflexive Banach spaces can be obtained so that the modulus of unifom convexity is of power type (G. Pisier). Pisier's approach uses the uniform convexity of the Bochner space $L_r(X)$. We show how to obtain the power type uniformly convex renorming of X under the weaker asumption that $L_r(X)$ has an AUC renorming of power type. These results follow earlier joint work with W.B. Johnson. (Received February 23, 2004)