Meeting: 1003, Atlanta, Georgia, AMS CP 1, AMS Contributed Paper Session

1003-30-1682 Roger W. Barnard (barnard@math.ttu.edu), Department of Mathematics and Statistics, Texas Tech University, Lubbock, TX 79409, Casey R. Hume\* (chume@math.ttu.edu), Department of Mathematics and Statistics, Texas Tech University, Lubbock, TX 79409, and G. Brock Williams (williams@math.ttu.edu), Department of Mathematics and Statistics, Texas Tech University, Lubbock, TX 79409. An Extremal Problem for Convex Domains.

We will discuss our progress on a problem posed by R. Fournier, J. Ma, and S. Ruscheweyh on determining the sharp minimum bound for the functional  $\frac{|a_4| - 2/(3M)}{|a_2|}$  for convex analytic functions  $|f| \leq M$ . This has interesting consequences in generalizing M. Chauqui and B. Osgood's results on the Nehari class. (Received October 06, 2004)