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

1003-30-1683 Roger W Barnard (barnard@math.ttu.edu), Department of Mathematics and Statistics, Texas Tech University, Lubbock, TX 79409, David R. Martin* (dmartin@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. Variational Techniques for Distortion Theorems in Hyperbolically Convex Domains.

We will describe our progress in determining explicitly the extremal domains maximizing distortion in hyperbolically convex domains. These problems were suggested in the work of C. Pommerenke and D. Mejía and have eluded researchers using previously known methods. (Received October 06, 2004)