Meeting: 1006, Lubbock, Texas, SS 5A, Special Session on Recent Advances in Complex Function Theory

1006-30-227 Roger W Barnard and G Lenny Ornas* (gornas@mcneese.edu), Box 92340, MSU, Lake Charles, LA 70609, and Kent Pearce. A Variational Method for Hyperbolically Convex Functions.

Using a theorem from the second author's dissertation, we find the extremal values for a class of functionals over spaces of hyperbolically convex functions, and functions corresponding to these values. We then show that certain functionals of interest fall in this class, thereby finding extremal functions solving these problems posed by Pommerenke and others. (Received February 15, 2005)