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

1006-30-207 Clint Richardson*, PO Box 13040–SFA Station, Nacogdoches, TX 75962, and Roger W. Barnard and Alex Yu. Solynin. *Minimal area problem for nonvanishing functions*. Preliminary report.

We consider the problem of determining the minimal area covered by the image of the unit disk for nonvanishing functions with the normalization f(0) = 1 and $f'(0) = \alpha$. This question is related to a well-known problem posed by A. W. Goodman in 1949 that regard minimizing area covered by analytic univalent functions under certain geometric constraints. (Received February 15, 2005)