

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

1006-30-248 **Jane M McDougall*** (jmcdougall@coloradocollege.edu), Department of Mathematics,
Colorado College, 14 East Cache La Poudre, Colorado Springs, CO 80903, and **Lisbeth**
Schaubroeck. *Geometric Properties of a class of non-convex harmonic maps.* Preliminary report.
We begin with a class of regular but "arbitrarily non-convex" stars onto which we can construct harmonic univalent functions from the unit disk. We show that various dilatations for these harmonic maps may be chosen, and discuss geometric features of the possible harmonic maps. In particular, we show the form of the minimal surface that "lift" over each of these harmonic maps. (Received February 15, 2005)