1125-30-1183 **Michael Dorff** (mdorff@math.byu.edu), Department of Mathematics, Brigham Young University, Provo, UT 84602, **Samaneh G. Hamidi*** (s.hamidi@mathematics.byu.edu), Department of Mathematics, Brigham Young University, Provo, UT 84602, **Jay M. Jahangiri** (jjahangi@kent.edu), Department of Mathematical Sciences, Kent State University, OH 44021, and **Elif Yasar** (elifyasar@uludag.edu.tr), Department of Mathematics, Faculty of Arts and Sciences, Uludag University, 16059 Bursa, Turkey. *Convolutions Of Univalent Harmonic Mappings.* Preliminary report.

Harmonic univalent mappings are a collection of univalent (i.e., 1-1) complex-valued functions, $f = u + iv$, where u and v satisfy Laplace's equation but not necessarily the Cauchy-Riemann equations. There has been much research done lately on the convolution of harmonic mappings. We prove some results concerning the convolution of univalent harmonic convex mappings provided that it is locally univalent and sense-preserving. In particular, let f_k (where $k = 1, 2$) be univalent harmonic functions that are shears of the analytic map $h_k - g_k = \frac{1}{2} \ln\left(\frac{1+z}{1-z}\right)$ with dilatation $\omega_k = e^{i\theta_k} z^k$. If the convolution $f_1 * f_2$ is locally one-to-one and sense-preserving, then $f_1 * f_2 \in S_H^O$ is convex in the direction of the real axis. In this talk we will discuss the proof of this result. (Received September 15, 2016)