1023-35-1613 Xiaobing Feng* (xfeng@math.utk.edu), Knoxville, TN 37996. Heat Flows of Linear Growth Maps and Color Image Denoising.

In this talks I shall first present some recent developments on p-harmonic map heat flows, in particular, for p=1, and flows of linear growth maps into spheres. I shall then discuss applications of these geometric flows to color image denoising based on the chromaticity and brightness decomposition. Finally, I shall present some numerical methods and computer simulations for the proposed color image denoising models. This is a joint work with John Barrett of Imperial College (UK), Andreas Prohl of University of Tuebengin (Germany), and Minun Yoon of University of Tennessee. (Received September 26, 2006)