## 1108-32-533 Liz Vivas\* (vivas.3@osu.edu), 231 West 18th Ave, Columbus, OH 43210. Parametrization of unstable manifolds for parabolic skew-products.

Given a parabolic map in one dimension  $f(z) = z + O(z^2)$ ,  $f \neq Id$ , it is known that there exists the analogous of stable and unstable domains. That is, domains in which every point is attracted by f (or by the inverse  $f^{-1}$ ) towards the fixed point. I will prove that there exists a natural parametrization for the unstable manifold in terms of iterates for some subset of parabolic maps and generalize this result for the case of skew-product maps that satisfy certain conditions. As time permits, I will give an application of this fact to construct Fatou disks for skew-product maps. (Received January 20, 2015)