1077-11-1289 Dragos Ghioca and Liang-Chung Hsia (tjtucker@gmail.com), Rochester, New York, and Thomas J Tucker\* (tjtucker@gmail.com), Department of Mathematics, University of Rochester, Rochester, NY 14627. Towards a dynamical relative Manin-Mumford conjecture.
Let f<sub>l</sub> be a family of polynomials over the complex numbers, with l varying, subject to certain hypotheses. Let a<sub>l</sub> and

Let  $j_l$  be a family of polynomials over the complex numbers, with t varying, subject to certain hypotheses. Let  $a_l$  and  $b_l$  be two families of points with l varying. We show that if there are infinitely many choices of complex z such that  $a_z$  and  $b_z$  are both preperiodic for  $f_z$ , then  $a_z$  and  $b_z$  satisfy a very simple relation. This can be interpreted geometrically as a dynamical variant of the relative Manin-Mumford conjecture for families of semiabelian varieties. The techniques here follow work of Baker, DeMarco, Masser, and Zannier. (Received September 18, 2011)