1064-37-55 **Eric Bedford*** (bedford@indiana.edu), Department of Mathematics, Rawles Hall, Bloomington, IN 47405. *Semi-parabolic implosion in C^2.* Preliminary report.

We consider a complex Hénon map f on C^2, and we suppose that the origin is fixed, and the multipliers there are 1 and $a < 1$. Specifically we suppose that $f(x, y) = (x + x^2 + \cdots, ay + \cdots)$, where "$\cdots$" indicates higher order terms in both x and y. We consider a 1-parameter familly of Hénon maps $f_\epsilon(x, y) = (x + \epsilon^2 + x^2 + \cdots_\epsilon, ay + \cdots_\epsilon)$, where $\epsilon \to 0$ is an essentially real parameter. We will show that the Julia sets for f_ϵ exhibit an "implosion" behavior which is analogous to the parabolic implosion that occurs in complex dimension 1.

This is joint work with John Smillie and Tetsuo Ueda. (Received August 23, 2010)