1038-37-252 **Robert W. O'Connell*** (rwoconne@indiana.edu), Indiana University, Rawles Hall 106, 831 E 3rd Street, Bloomington, IN 47405. *Pinching Deformations of Rational Maps.*

Let f be a rational map defined on the Riemann sphere. Then f defines a dynamical system whose chaotic locus is called the Julia set. A pinching deformation, $f_t, t > 0$, is a one-parameter family of deformations of f. It is a way to create a parabolic cycle by forcing an attracting cycle and a repelling cycle to collide. The main result shows that for certain pinching deformations, if $f_t \to g$ uniformly, then the Julia set of f_t converges in the Hausdorff topology to the Julia set of g. (Received February 11, 2008)