1016-32-90 Eric Bedford and Kyounghee Kim* (kyoukim@indiana.edu), Department of Mathematics, Indiana University, Bloomington, IN 47405. On the Cohomological Approach to Birational Dynamics.

Let f be a birational map of \mathbf{P}^k . Using a blowing-up procedure on \mathbf{P}^k , we construct a new space X so that the induced map f_X behaves well on the cohomology classes $H^{1,1}(X)$. In many cases, this procedure allows us to obtain information about f. We illustrate this using a family of birational mappings obtained from linear fractional recurrence relations. (Received February 03, 2006)