1147-37-230 Jonguk Yang* (jonguk.yang@stonybrook.edu). Dynamics of Irreducible Polynomials with an Attracting Point.

Let f be a polynomial (of any degree) with an attracting periodic point. Suppose that f is irreducible—that is, f has a connected Julia set, and the dynamics of f is not the product of gluing together two or more simpler polynomials. For such f, we provide an explicit model of the Julia set which is homeomorphic to it if and only if the Julia set is locally connected. We then state a local connectivity result for the Julia set in the case when the critical points for f have non-persistently recurrent combinatorics. (Received January 12, 2019)