

1131-37-185

Mark David Comerford* (mcomerford@math.uri.edu), 5 Lippitt Road, Room 200, Kingston, RI 02881. *Neutral Fixed Points in non-Autonomous Iteration.*

Although the concept of periodicity does not exist as such in non-autonomous iteration, properties of neutral fixed points are extremely useful in constructing interesting examples in non-autonomous polynomial dynamics. We exhibit a number of increasingly complex examples, from polynomial sequences where all the critical points escape but yet there are bounded Fatou components, to Julia sets of positive area which admit an invariant sequence of measurable line fields. We conclude with work in progress showing that one can construct a sequence of polynomials with a Fatou component on which every univalent function from the classical Schlicht class on the unit disc is a limit function. (Received July 14, 2017)