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**Daniel Cuzzocreo\*** (dcuzz@bu.edu). *Parameter Space Structures for Singular Perturbations of Polynomials.*

The one-parameter families of maps of the form  $z^n + \lambda/z^d$  form a convenient class of rational maps to analyze. As singular perturbations of  $z \mapsto z^n$ , their dynamics share important properties with those of polynomials. There is always a superattracting fixed point at infinity when  $n \geq 2$ , and for each fixed  $n$  and  $d$  there is a single free critical orbit, so we can study bifurcations by analyzing the behavior of the critical orbit in relation to external and internal rays. In this talk we discuss some of the structures that arise in the highly intricate parameter spaces for these families. (Received September 12, 2013)