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Location of Siegel capture polynomials in parameter spaces of cubic polynomials

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Abstract: We study the set of cubic polynomials f with a Siegel disk containing an eventual image of a critical point and call them *IS-capture polynomials* (“IS” stands for Invariant Siegel). We study the location of IS-capture polynomials in the parameter space of all marked cubic polynomials and show that any IS-capture polynomial is on the boundary of a unique bounded hyperbolic component determined by the rational lamination of the map.