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Michael J Miller* (millermj@lemoyne.edu), Dept of Mathematics, Le Moyne College, Syracuse, NY 13214. *On minimal Rolle's domains for complex polynomials.*

Define a subset of the complex plane to be a *Rolle's domain* if it contains (at least) one critical point of every complex polynomial P such that $P(-1) = P(1)$. Define a Rolle's domain to be *minimal* if no proper subset is a Rolle's domain.

In this paper, we investigate minimal Rolle's domains. (Received September 18, 2009)