

MR2107731 (2006g:30011) 30C15**Lin, Ai-guo; Huang, Bing-jia; Cao, Jian-sheng (1-ETNS);****Gardner, Robert [Gardner, Robert Bentley] (1-ETNS)****Some results on the location of zeros of analytic functions. (English, Chinese summaries)***Gongcheng Shuxue Xuebao* **21** (2004), no. 5, 785–791.

Summary: “The classical Eneström-akeya theorem states that if $p(z) = \sum_{\nu=0}^n a_{\nu} z^{\nu}$ is a polynomial such that $0 \leq a_0 \leq a_1 \leq a_2 \leq \cdots \leq a_n$, then all of the zeros of $p(z)$ lie in the region $|z| \leq 1$ in the complex plane. Many generalizations of the Eneström-akeya theorem exist which put various conditions on the coefficients of the polynomial (such as mononicity of the moduli of the coefficients). In this paper, we will introduce several results which put conditions on the coefficients of even powers of z and on the coefficients of odd powers of z . As a consequence, our results will be applicable to some analytic functions to which these related results are not applicable.”

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