

# Review of: "Negativity, zeros and extreme values of several polynomials"

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Potential competing interests: No potential competing interests to declare.

## Review Report

Title: Negativity, zeros, and extreme values of several single-variable polynomials

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In this paper, the authors have studied the negativity, zeros, and extreme values of several single-variable polynomials  $G(t)$ ,  $H(t)$ ,  $J(t)$  and  $K(t)$ .

In my opinion, the results are important and, to the best of my knowledge, are novel. However, certain straightforward queries/typos need to be addressed:

- In Proposition 1, the required only is to show that  $\phi$  is negative on  $\mathbb{R}$ , so what is the benefit to study the monotonicity of  $\phi$ ?
- The authors should add in the introduction section a motivation for the applications of these polynomials.

After taking the following comments into consideration, I recommend the publication of this paper in Qeios