# POLYNOMIAL AUTOMORPHISMS OF $\mathbf{C}^n$ PRESERVING MARKOFF-HURWITZ POLYNOMIAL

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We study the action of the group of polynomial automorphisms of $\mathbf{C}^n (n \geq 3)$ which preserve the Markoff-Hurwitz polynomial

$$H(x_1, x_2, ..., x_n) := x_1^2 + x_2^2 + \cdots + x_n^2 - x_1 x_2 \cdots x_n.$$

Our main results include the determination of the group, the description of a non-empty open subset of $\mathbf{C}^n$ on which the group acts properly discontinuously (domain of discontinuity), and identities for the orbits of points in the domain of discontinuity.

This is joint work with H. Hu and S. P. Tan appeared in [arXiv 1501.06955].

## References

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