

# NOTES ON RENORMALIZATION OF COMPLEX POLYNOMIALS

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ABSTRACT. Renormalization is a topic of interest in many areas of mathematics. The following are some informal notes on renormalization of complex polynomials and on the motivation that makes this subject important in the field of complex dynamics. They are intended for mathematicians whose research is in some other areas where renormalization is also a topic of interest. They are in no way a complete or deep exposition of the subject though we try to give a general idea of what complex renormalization is about and how it relates to the main problems that are currently open in holomorphic dynamics, together with several examples.

This paper is mainly based on parts of the book *Complex Dynamics and Renormalization* by Curtis T. McMullen which we refer to for a complete exposition and many of the proofs.

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