

ALGEBRAIC DEGREES FOR ITERATES OF MEROMORPHIC SELF-MAPS OF \mathbb{P}^k

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Abstract

We first introduce the class of quasi-algebraically stable meromorphic maps of \mathbb{P}^k . This class is strictly larger than that of algebraically stable meromorphic self-maps of \mathbb{P}^k . Then we prove that all maps in the new class enjoy a recurrent property. In particular, the algebraic degrees for iterates of these maps can be computed and their first dynamical degrees are always algebraic integers.

2000 *Mathematics Subject Classification*. Primary: 32F50; Secondary: 58F15, 58F23.

Key words. Quasi-algebraically stable meromorphic map, algebraic degree, first dynamical degree.