GREEN CURRENTS FOR QUASI-ALGEBRAICALLY
STABLE MEROMORPHIC SELF-MAPS OF $\mathbb{P}^k$

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Abstract: We construct a canonical Green current $T_f$ for every quasi-algebraically stable meromorphic self-map $f$ of $\mathbb{P}^k$ such that its first dynamical degree $\lambda_1(f)$ is a simple root of its characteristic polynomial and that $\lambda_1(f) > 1$. We establish a functional equation for $T_f$ and show that the support of $T_f$ is contained in the Julia set, which is thus non empty.

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Key words: quasi-algebraically stable meromorphic map, algebraic degree, first dynamical degree, Green current.