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**Malgorzata Sabina Stawiska\*** ([stawiska@math.uic.edu](mailto:stawiska@math.uic.edu)), Dept. of Mathematics, Stat. & Comp. Science, 851 S. Morgan St., Chicago, IL 60607. *Attracting hypersurfaces for holomorphic endomorphisms of  $\mathbb{C}\mathbb{P}^k$* . Preliminary report.

We give conditions under which a holomorphic endomorphism  $f$  of  $\mathbb{C}\mathbb{P}^k$  has an attracting hypersurface  $A$ . The conditions are formulated in terms of pluripotential theory on  $\mathbb{C}\mathbb{P}^k \setminus A$  and of the behavior of plurisubharmonic exhaustions on  $\mathbb{C}\mathbb{P}^k \setminus A$  under pushing forward by  $f$ . A relation with the theory of quasi-plurisubharmonic functions is shown. (Received February 13, 2006)