1139-37-380 **Mattias Jonsson*** (mattiasj@umich.edu), Mathematics, University of Michigan, Ann Arbor, MI 48109-1043. *On dynamical height functions for rational maps.*

Consider a rational selfmap f of a projective variety defined over a the field $\overline{\mathbf{Q}}$ of algebraic numbers. A fundamental invariant of f is the first dynamical degree δ_f , measuring the asymptotic degree growth of f^n as $n \to \infty$. In many instances, one expects there to be a nonnegative (but not identically zero) dynamical height function $\hat{h}_f$ on $X(\overline{\mathbf{Q}})$ satisfying the invariance relation $\hat{h}_f \circ f = \delta_f \hat{h}_f$. I will discuss some instances when this is known. (Received February 16, 2018)