1131-14-412   **Min Ru** (`minru@math.uh.edu`), Department of Mathematics, University of Houston, 4800 Calhoun Road, Houston, TX 77204, and **Paul Vojta*** (`vojta@math.berkeley.edu`), Department of Mathematics, University of California, 970 Evans Hall #3840, Berkeley, CA 94720-3840. *Birational Nevanlinna constants and work of Autissier.* Preliminary report.

In 2002, Corvaja and Zannier obtained a new proof of Siegel's theorem (on integral points on curves) based on Schmidt's celebrated Subspace Theorem. Soon after that (and based on earlier work), Evertse and Ferretti applied Schmidt's theorem to give diophantine results for homogeneous polynomials of higher degree on a projective variety in $\mathbb{P}^n$. This has led to further work of A. Levin, P. Autissier, M. Ru, G. Heier, and others. In particular, Ru defined a number, $\text{Nev}(D)$, that concisely describes the best diophantine approximation obtained by this method. Here D is an effective Cartier divisor on a projective variety X.

In this talk, we will give a birational variant of $\text{Nev}(D)$, defined using the theory of b-divisors and corresponding b-Weil functions. If time permits, we will sketch how work of Autissier can be derived using this constant. (Received July 18, 2017)