1116-11-593 **Wade Hindes*** (whindes@gc.cuny.edu). *The average number of integral points in orbits.*

Over a number field K, a celebrated result of Silverman's states that if $\phi \in K(x)$ is a rational function whose second iterate is not a polynomial, the set of S-integral points in the orbit $\mathcal{O}_\phi(b) = \{\phi^n(b)\}_{n\geq 0}$ is finite for all $b \in \mathbb{P}^1(K)$. In this talk, we show that if we vary ϕ and b in a suitable family, the number of S-integral points of $\mathcal{O}_\phi(b)$ is absolutely bounded. In particular, if we fix $\phi \in K(x)$ and vary the base point $b \in \mathbb{P}^1(K)$, we show that $\#(\mathcal{O}_\phi(b) \cap \mathcal{O}_{K,S})$ is zero on average. Finally, we prove an analogous averaging result in general, assuming a standard conjecture in arithmetic geometry, and prove it unconditionally over global function fields. (Received September 08, 2015)