1135-11-2767 **Thái Hoàng Lê*** (leth@olemiss.edu) and **Pierre-Yves Bienvenu**. *Uniformity of the Möbius function in function fields.* Preliminary report.

The Möbius randomness principle states that the Möbius function does not correlate with "structured", or "low complexity" sequences. We study a function field instance of this principle. Let $\mathbb{F}_p[t]$ be the ring of polynomials over $\mathbb{F}_p$ and μ be the Möbius function defined on $\mathbb{F}_p[t]$. We are interested in non-trivial, uniform bounds for exponential sums $\sum_{\deg f=n} \mu(f)e_p(Q(f))$, where Q is any multivariate polynomial in $n+1$ variables and $Q(f)$ is Q evaluated at the coefficients of f. I will talk about our result in the linear case and progress in the quadratic case. This is joint work with Pierre-Yves Bienvenu. (Received September 26, 2017)