1145-37-1010 **Kevin McGoff*** (kmcgoff1@uncc.edu). *Pressure and escape rates for random subshifts of finite type.* Preliminary report.

This talk concerns aspects of the thermodynamic formalism in a randomized setting. Let X be a non-trivial mixing shift of finite type, and let $f : X \to \mathbb{R}$ be a Hölder continuous potential with associated Gibbs measure μ. Further, fix a parameter $\alpha \in (0, 1)$. For each $n \geq 1$, let $\mathcal{F}_n$ be a random subset of words of length n, where each word of length n that appears in X is included in $\mathcal{F}_n$ with probability $1 - \alpha$, independently of all other words. Then let $Y_n = Y(\mathcal{F}_n)$ be the random subshift of finite type obtained by forbidding the words in $\mathcal{F}_n$ from X. In our first result, for α sufficiently close to 1 and n tending to infinity, we show that the pressure of f on Y_n converges in probability to the value $P_X(f) + \log(\alpha)$, where $P_X(f)$ is the pressure of f on X. Additionally, let $H_n = H(\mathcal{F}_n)$ be the random hole in X consisting of the union of the cylinder sets of the words in $\mathcal{F}_n$. In our second result, for α sufficiently close to one and n tending to infinity, we show that the escape rate of μ-mass through H_n converges in probability to the value $-\log(\alpha)$ as n tends to infinity. (Received September 18, 2018)