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Antonio Auffinger* (auffing@math.northwestern.edu), **Michael Damron** and **Jack T Hanson**. *Rate of convergence of the mean for sub-additive ergodic sequences.*

For a subadditive ergodic sequence $\{X_{m,n}\}$, Kingman's theorem gives convergence for the terms $X_{0,n}/n$ to some non-random number g . In this talk, I will discuss the convergence rate of the mean $EX_{0,n}/n$ to g . This rate turns out to be related to the size of the random fluctuations of $X_{0,n}$; that is, the variance of $X_{0,n}$, and the main theorems I will present give a lower bound on the convergence rate in terms of a variance exponent. The main assumptions are that the sequence is not diffusive (the variance does not grow linearly) and that it has a weak dependence structure. Various examples, including first and last passage percolation, bin packing, and longest common subsequence fall into this class. (Received December 17, 2014)