1047-37-289 **Paul Balister** and **Randall McCutcheon*** (rmcctchn@memphis.edu), Dept. Math. Sci., U. Memphis, Memphis, TN 38152. *A concentration function estimate and intersective sets from matrices.*

We give several conditions on an infinite integer matrix (d_{ij}) for the set $R = \{ \sum_{ij\in\alpha, i>j} d_{ij} : \alpha \subset \mathbf{N}, |\alpha| < \infty \}$ to be a set of measurable recurrence, including $d_{ij} = j^i$ and $0 < d_{nj} = o\big(\sqrt{\frac{n}{\log n}}\big)$. For the latter, a concentration function estimate of independent interest is applied to sums of sequences of 2-valued random variables whose means may tend to ∞ as $\sqrt{\frac{n}{\log n}}$. (Received January 30, 2009)