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Central, SC 29630. *Dependence Among Random Binary Vectors*. Preliminary report.

Randomly select a sequence of independent vectors $\underline{v}_1, \underline{v}_2, \dots, \underline{v}_l$ in \mathbb{F}_2^k such that the components of each vector \underline{v} are independent and $Pr(\underline{v}[j] = 1) = \alpha_j$. We discuss upper and lower bounds for l which ensure that with high probability the vectors are linearly dependent. (Received September 26, 2006)