

Minors of a random binary matroid

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Let $\mathbf{A} = \mathbf{A}_{n,m,k}$ be a random $n \times m$ matrix over \mathbf{GF}_2 where each column consists of k randomly chosen ones. Let M be an arbitrary fixed binary matroid. We show that if m/n and k are sufficiently large then as $n \rightarrow \infty$ the binary matroid induced by \mathbf{A} contains M as a minor.