

THE CRITICAL WINDOW IN RANDOM DIGRAPHS

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We consider the component structure of the random digraph $D(n, p)$ inside the critical window $p = n^{-1} + \lambda n^{-4/3}$. We show that the largest component \mathcal{C}_1 has size of order $n^{1/3}$ in this range. In particular we give explicit bounds on the tail probabilities of $|\mathcal{C}_1|n^{-1/3}$.