Zbl 535.05049
Erdős, Paul; Palka, Z.
Trees in random graphs. (In English)
Discrete Math. 46, 145-150 (1983); addendum ibid 48, 331 (1984). [0012- 365X]

The probability space consisting of all graphs on a set of n vertices where each edge occurs with probability p, independently of all other edges, is denoted by $G(n,p)$. Theorem: For each $\epsilon > 0$ almost every graph $G \in G(n,p)$ is such if $(1+\epsilon)\log n/\log d < r < (2-\epsilon)\log n/\log d$ where $d = 1/(1-p)$, then G contains a maximal induced tree of order d. Problem: Let p be a function of n, find such a value of p for which a graph $G \in G(n,p)$ has the greatest induced tree.

J.Mitchem

Classification:
05C80 Random graphs
05C05 Trees
60C05 Combinatorial probability

Keywords:
induced star; maximal induced tree