1001-05-394 **Tom Bohman*** (tbohman@moser.math.cmu.edu), Department of Mathematical Sciences, Carnegie Mellon University, Pittsburgh, PA 15213, and **David Kravitz**. *Creating a giant component.*

Let c be a constant and $(e_1, f_1), (e_2, f_2), \ldots, (e_{cn}, f_{cn})$ be a sequence of ordered pairs of edges on vertex set $[n] = \{1, 2, \ldots, n\}$ chosen uniformly and independently at random. Let A be an algorithm for the on-line choice of one edge from each presented pair, and for $i = 1, \ldots, cn$ let $G_A(i)$ be the graph on vertex set $[n]$ consisting of the first i edges chosen by A. In this talk we will discuss a number of questions regarding the component structure of these random graphs and give the sketch of a proof that all algorithms in a certain class have a critical value c_A for the emergence of a component of size $\Omega(n)$ in $G_A(cn)$. (Received August 31, 2004)