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Laura Eslava* (laura.eslava@math.gatech.edu), 686 Cherry Street NW, Atlanta, GA 30332,
and **Lutz Warnke**. *The size of the giant component in the random d -process*. Preliminary report.

Graph processes $(G(i), i \geq 0)$ are usually defined as follows. Starting from the empty graph on n vertices, at each step i a random edge is added from a set of available edges. For the d -process, edges are chosen uniformly at random among all edges joining vertices of current degree at most $d - 1$.

The fact that, during the process, vertices become 'inactive' when reaching degree d makes the process depend heavily on its history. However, it shares several qualitative properties with the classical Erdos-Renyi graph process. For example, there exists a critical time t_c at which a giant component emerges, whp (that is, the largest component in $G(tn)$ goes from logarithmic to linear order).

In this talk we consider $d \geq 3$ fixed and describe the growth of the size of the giant component. In particular, we show that whp the largest component in $G((t_c + \varepsilon)n)$ has asymptotic size cn , where $c \sim c_d \varepsilon$ is a function of time ε as $\varepsilon \rightarrow 0+$. (Received February 11, 2018)