1037-05-200 **Stefanie Gerke*** (stefanie.gerke@rhul.ac.uk), Mathematics Department, Royal Holloway College, University of London, Egham, TW20 OEX, England, and **Paul Balister** and **Bela Bollobas**. *Connectivity of random addable graphs.*

A non-empty class $\mathcal{A}$ of labelled graphs is weakly addable if for each graph $G \in \mathcal{A}$ and any two distinct components of $G$, any graph that can be obtain by adding an edge between the two components is also in $\mathcal{A}$. For a weakly addable graph class $\mathcal{A}$, we consider a random element $R_n$ chosen uniformly from the set of all graph in $\mathcal{A}$ on the vertex set $\{1, \ldots, n\}$. McDiarmid, Steger and Welsh conjecture that the probability that $R_n$ is connected is at least $e^{-1/2} + o(1)$ as $n \to \infty$, and showed that it is at least $e^{-1}$ for all $n$. We improve the result, and show that this probability is at least $e^{-0.7983}$ for sufficiently large $n$. We also consider 2-addable graph classes $\mathcal{B}$ where for each graph $G \in \mathcal{B}$ and for any two distinct components of $G$, the graphs that can be obtained by adding at most 2 edges between the components are in $\mathcal{B}$. We show that a random element of a 2-addable graph class on $n$ vertices is connected with probability tending to 1 as $n$ tends to infinity. (Received February 02, 2008)