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**Gabor Kun\*** ([kungabor@cs.elte.hu](mailto:kungabor@cs.elte.hu)), School of Computing Science, Burnaby, BC V5A 1S6, Canada. *The asymptotical version of the Bollobas-Catlin-Eldridge conjecture.*

We say that two graphs  $G$  and  $H$  pack if  $G$  and  $H$  can be embedded into the same vertex set such that the images of the edge sets do not intersect. Bollobas and Eldridge, and independently Catlin conjectured that if the graphs  $G$  and  $H$  on  $n$  vertices with maximum degree  $M(G)$  and  $M(H)$ , respectively, satisfy  $(M(G) + 1)(M(H) + 1) \leq n + 1$  then  $G$  and  $H$  pack.

This was proved in the case  $M(H) \leq 2$  by Aigner, Brandt and independently by Alon, Fischer. Csaba, Shokoufandeh and Szemerédi proved the conjecture if  $M(H) \leq 3$  and the number of vertices is large enough. Bollobas, Kostochka and Nakprasit settled the case when one of the graphs is sparse ( $d$ -degenerate). Kaul, Kostochka and Yu proved that  $G$  and  $H$  pack if  $M(G)M(H) \leq 0.6n + 1$  and the degrees are large enough.

We prove that for every  $c > 0$  if  $M(G)$  and  $M(H)$  are large enough (depending on  $c$ ) and  $M(G)M(H)(1 + c) < n$  holds then  $G$  and  $H$  pack. Our proof strategy is to put the graphs on the same vertex set randomly and to modify this configuration randomly not allowing any new coincidence of edges in the flavour of Kaul, Kostochka and Yu. The key is to maintain pseudorandomness for these pair of embeddings during the process. (Received January 31, 2008)