

1023-05-1075 **Ken-ichi Kawarabayashi*** (k_keniti@nii.ac.jp), 2-1-2, Hitotsubachi, Chiyoda-ku, Tokyo, 1018430, Japan. *Progress on Lovász' Path Removal Conjecture.*

We discuss our recent work on Lovász's path removal conjecture. Among our results, we will present the following: There exists a function $f(k)$ such that for every $f(k)$ -connected graph G and for every edge $e \in E(G)$, there exists an induced cycle C containing e such that $G - E(C)$ is k -connected. This proves a weakening of a conjecture of Lovász due to Kriesell. Joint work with O. Lee, B. Reed and P. Wollan. (Received September 25, 2006)