

Conj. (Li and Tian) -

Let G be a k -connected simple graph of order n . Then if for any $k+1$ independent vertices v_1, v_2, \dots, v_{k+1} ,

$$\sum_{i=1}^{k+1} d(v_i) \geq n + (k-1)(\alpha-1)$$

G is hamiltonian.

Hao LI

L. R. I. UMR 8623, CNRS-Univ. Paris 11

Bât 490, Université Paris-Sud 11

F 91405 Orsay, France

li@lri.fr

$k=1$ Ore

$k=2$. Bauer, Broersma, R. Li and Veldman
(1989)

$k=3$ Harker, Li and Tian (2000)

$k=4$ $\sigma_5 \geq n + 3(d-1) + 14$
(Li, Tian, Xu)

$k=5$. 9-com. $\sigma_6 \geq n + 4(d-1)$
(Li, Zhang, Zhou)