1067-05-420   **Suil O*** (`suilo2@math.uiuc.edu`), 409 W. Green Street, Urbana, IL 61801, and **Douglas B West** and **Hehui Wu**. *Longest Cycles in k-connected Graphs with Given Independence Number.*

The Chvátal-Erdős Theorem states that every graph whose connectivity is at least its independence number has a spanning cycle. In 1976, Fouquet and Jolivet conjectured an extension: If G is an n-vertex k-connected graph with independence number a, and $a \geq k$, then G has a cycle with length at least $\frac{k(n+a-k)}{a}$. We prove this conjecture. (Received September 09, 2010)