1086-05-1125 **H. Kierstead** (kierstead@asu.edu), School of Math. Sciences and Statistic, Arizona State University, Tempe, AZ 85287, **A. Kostochka*** (kostochk@math.uiuc.edu), Dept. of Mathematics, 1409 W. Green St., Urbana, IL 61801, and **E. Yeager** (yeager2@illinois.edu), Dept. of Mathematics, 1409 W. Green St., Urbana, IL 61801. *A refinement of the Corrádi-Hajnal Theorem.* Preliminary report.

Corrádi and Hajnal proved in 1963 the conjecture by Erdős that if $n \geq 3k$, then every n-vertex graph G with minimum degree at least $2k$ contains k vertex-disjoint cycles. The restriction on the minimum degree is sharp.

We prove a Brooks-type result describing for $k \geq 3$ the extremal graphs for the theorem. Namely, we show that if $k \geq 3$ and G is a graph with $n \geq 3k$ vertices and minimum degree at least $2k - 1$ that has no k vertex-disjoint cycles, then either G has an independent set of size $n - 2k + 1$ or $n = 3k$ and the complement of G is the disjoint union of a copy of K_k and a copy of $K_{k,k}$.

We also consider extremal graphs for the Ore-type version of the Corrádi-Hajnal Theorem. (Received September 19, 2012)