

1073-05-221

Dong Ye* (dye@math.wvu.edu), Department of Mathematics, West Virginia University, Morgantown, WV 26506, and **Cun-Quan Zhang** (cqzhang@math.wvu.edu), Department of Mathematics, West Virginia University, Morgantown, WV 26506. *Circumference and Cycle Double Cover.*

Let G be a bridgeless cubic graph with n vertices. The circumference of G is the size of a longest circuit of G . By using computers, Hägglund and Markstöm verified that G has a cycle double cover if its circumference is at least $n - 10$. In this talk, we give a direct proof to show that a cubic graph G with circumference at least $n - 8$ has a cycle double cover. (Received August 02, 2011)