1073-05-248 Wenliang Tang* (victor_251@math.wvu.edu), Dept. of Mathematics, West Virginia Universit, Morgantown, WV 26505, and Erling Wei and Cunquan Zhang. On Strong Circuit Double Cover Conjecture with Special Property. Preliminary report.

Let G be a bridgeless cubic graph and C is any given circuit in G, it was conjectured that we can find a family of circuits \mathcal{F} containing C such that every edge of G is covered exactly by two members of \mathcal{F} . This is the well-known Strong Circuit Double Cover. In this paper we verified this conjecture on the following two special classes of cubic graphs:

- 1. For a pair (G, C), if H = G C contains a Hamilton path of order less than 23, then G has a circuit double cover containing C;
- 2. For a pair (G, C), if H = G C contains a Y-tree of order less than 20, then G has a circuit double cover containing C;

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