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*Finding Triangle-free 2-factors, Revisited*

A 2-factor in a graph is a spanning subgraph whose connected components are cycles. Finding 2-factors in graphs is a well-studied problem. Many results are known including a polynomial-time algorithm and a related max-min theorem. This problem is a relaxation of the NP-hard problem of finding a Hamilton cycle. A stronger relaxation is the problem of finding a 2-factor containing no cycle of length 3. A polynomial-time algorithm and related max-min theorem for this problem were presented in the speaker's Ph.D. thesis. Here we present a simpler polynomial-time algorithm for this problem and a newly formulated max-min theorem.