

AGCO Seminar

Author: Tobias Mömke, Saarland University.

Where: Av República 701, Sala 33.

When: Wednesday, April 17, 14:30.

Title: Finding 2-factors without triangles

Abstract: A 2-factor is a set of edges M of a graph G such that each vertex is incident to exactly two edges of M . Thus M determines a set of cycles in G .

One can efficiently compute minimum cost 2-factors in weighted graphs. It is open whether one can do the same, if we forbid triangles, i.e., each cycle has at least four edges. For the unweighted case, a complicated result of Hartvigsen shows that one can find such a 2-matching in polynomial time.

In the talk, we will review known results related to finding triangle free 2-factors, see its relation to the traveling salesman problem, and discuss several open problems.