

AGCO Seminar

Speaker: *Speaker:* Laura Vargas Koch, U Chile

Title: Solidarity Cover Problem.

Abstract: This work started with a real-world problem where the task was to partition a set of locations into disjoint subsets such that each subset is spread in a way that it covers the whole set with a certain radius.

This made us formalizing the following problem which we call Solidarity Cover Problem. Given a finite set S , a metric d , and a radius r , and a number of partitions m . We define a subset C of S to be an r -cover if $B(C, r) = S$. The Solidarity Cover Problem is the problem of determining whether there exist m disjoint r -covers. We consider the optimization problems of maximizing the number of r -covers which is essentially the domatic number problem, and the optimization problem of minimizing the radius.

This is joint work with Britta Peis and Eran Rosenbluth.

When: August 24, 15:00 hrs.

Where: Sala de Seminario John Von Neuman, CMM, Beauchef 851, Torre Norte.

