

## SEMINARIO DE ÁLGEBRA

## Group Partitions of Minimal Size

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Abstract. A cover of a finite group G is a family of proper subgroups of G whose union is G, and a cover is called minimal if it is a cover of minimal cardinality. A partition of G is a cover such that the intersection of any two of its members is  $\{1\}$ . We will talk about finite groups that admit a minimal cover that is also a partition. This happens if and only if G is isomorphic to  $C_p \times C_p$  for some prime p or to a Frobenius group with Frobenius kernel being an abelian minimal normal subgroup and Frobenius complement cyclic.