

# First Joint Meeting Brazil Italy of Mathematics

## Special Session: Group Theory

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**Title:** Irredundant covers of finite groups.

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**Abstract:** A cover of a finite group  $G$  is a family  $C$  of proper subgroups of  $G$  whose union is  $G$ . A cover  $C$  of  $G$  is called irredundant if no proper subfamily of  $C$  is a cover of  $G$ . In a recent paper with A. Lucchini we classified the finite groups  $G$  for which all irredundant covers have the same cardinality. In this talk we present this result and we illustrate the main ideas of its proof.