

First Joint Meeting Brazil Italy of Mathematics

Special Session: Group Theory

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Title: Weak commutativity of groups

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Abstract: Let G be a group and $\psi : G \rightarrow G^\psi$ be an isomorphism of groups. We will discuss some joint results (with S. Sidki) on the homological and homotopical finiteness properties FP_m and F_m of the group $\chi(G)$ defined by S. Sidki in J. Algebra, 1980 as $\chi(G) = G * G^\psi / N$ where N is the normal closure of $\{[g, g^\psi]\}_{g \in G}$. If the time permits we will discuss some related constructions and discuss the case of pro- p groups too.