

1035-16-44

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Department of Mathematics, SLU Box 10687, Hammond, LA. *Rings determined by covers of groups*. Preliminary report.

Let G be a group and C be a set of abelian subgroups of G which form a cover of G . Let $M_0(G)$ be the nearring of zero-preserving functions from G into G . Let $R(C)$ be the set of functions in $M_0(G)$ which are linear maps of each subgroup in C into itself. $R(C)$ is always a ring. We discuss which covers yield rings having certain properties; e.g., simple, maximal in $M_0(G)$, minimal in $M_0(G)$. (Received June 22, 2007)