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subdirect product of groups

Canonical name	SubdirectProductOfGroups
Date of creation	2013-03-22 14:53:25
Last modified on	2013-03-22 14:53:25
Owner	yark (2760)
Last modified by	yark (2760)
Numerical id	7
Author	yark (2760)
Entry type	Definition
Classification	msc 20E26
Synonym	subdirect product
Synonym	subcartesian product
Synonym	subcartesian product of groups
Related topic	ResiduallyCalP
Related topic	DirectProductAndRestrictedDirectProductOfGroups

Let  $(G_i)_{i \in I}$  be a family of groups. A <http://planetmath.org/Subgroup>  $H$  of the <http://planetmath.org/DirectProductAndRestrictedDirectProductOfGroups> direct product  $\prod_{i \in I} G_i$  is said to be a *subdirect product* (or *subcartesian product*) of  $(G_i)_{i \in I}$  if  $\pi_i(H) = G_i$  for each  $i \in I$ , where  $\pi_i: \prod_{i \in I} G_i \rightarrow G_i$  is the  $i$ -th projection map.