Abelian groups with partial decomposition bases.
Preliminary report.

We study the class of abelian groups with partial decomposition bases in $L_{\infty \omega}^\delta$ where $\delta$ is an ordinal. This class contains the class of Warfield groups which are abelian groups $G$ with a decomposition basis $X$ such that $G/\langle X \rangle$ is simply presented.

In this paper, we give a classification theorem in $L_{\infty \omega}^\delta$ in terms of numerical invariants derived from the classical Ulm and Warfield invariants. (Received September 16, 2011)