A group $G$ is capable if there exists a group $H$ such that $G \cong H/Z(H)$. A complete characterization of capability exists for abelian groups $G$ that are direct sums of cyclic groups; metacyclic groups; extra-special $p$-groups; and some restricted classes (e.g., 2-generated $p$-groups of class 2).

For the class of $p$-groups of class 2 and exponent $p$, some necessary and some sufficient conditions are known, but no complete characterizations. We discuss some ways of constructing capable and non-capable groups in this class, and the following conjecture:

**Conjecture.** Let $G$ be a $p$-group of class two and exponent $p$. Then $G$ is capable if and only if for every generating set $X$ of $G$, we have $\cap_{x \in X}[C_G(x), C_G(x)] = 1$. (Received September 19, 2010)