

Title: On p -hypercyclically embedded subgroups of finite groups

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Let G be a finite group and p a prime. A normal subgroup E of G is said to be p -hypercyclically embedded in G if every p -chief factor of G below E is cyclic. We say that a subgroup H of G is generalized $S\Phi$ -supplemented in G if G has a subnormal subgroup T such that $G = HT$ and $(H \cap T)H_{sG}/H_{sG} \leq \Phi(H/H_{sG})$, where H_{sG} is the subgroup of H generated by all those subgroups of H which are s -permutable in G . In this paper, some new characterizations of p -hypercyclically embeddability of normal subgroups of a finite group are obtained based on the assumption that some primary subgroups are generalized $S\Phi$ -supplemented in G .

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