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Joseph Evan* (jmevan@kings.edu), Department of Mathematics, King's College, Wilkes-Barre, PA 18711. *An Introduction to Permutably Detectable Groups*. Preliminary report.

A group G is normally detectable if for any direct product of finitely many copies of G , the only normal subgroups isomorphic to G are the direct factors. In 1977, T.O. Hawkes conjectured that a finite group G is normally detectable if and only if G is directly indecomposable and $|Z(G)|$ and $|G/G'|$ are relatively prime. This conjecture remains unresolved.

A subgroup M of a group G is a permutable subgroup of G if for all subgroups X of G , we have $MX=XM$. It is then natural for us to define a group G as permutably detectable if for any direct product of finitely many copies of G , the only permutable subgroups isomorphic to G are the direct factors.

In this talk, we will present an analogous conjecture for finite permutably detectable groups. We will analyze this conjecture, and discuss examples and results which provide further insight into this property. (Received September 19, 2005)