1145-VL-1080 **Josh Hiller*** (johiller@adelphi.edu), Department of Mathematics and Computer Scienc, Adelphi University, Garden City, NY 11050, and **Tuval Foguel**, Department of Mathematics and Computer Scienc, Adelphi University, Garden City, 11050. *On n- abelian coverings of finite groups.*

For a finite group $G$, define the commutative graph of $G$, $C(G)$, as the simple, loopless, and undirected graph with vertex set the elements of $G$ and an edge between $a, b \in G$ if $ab = ba$. For any graph $\Gamma$ define an $n - clique$ partition of the vertices of $\Gamma$ to be a partition of the vertices into exactly $n$ complete induced subgraphs. We say a group $G$ has an $n - abelian$ partition if $C(G)$ has an $n - clique$ partition where every clique contains at least two vertices. In this presentation we present some basic properties of $C(G)$ for various important families of groups. We also make strides towards a classification of of which groups admit an $n-$abelian covering for some $n$. We conclude with some open problems. (Received September 18, 2018)