Properties of Subgroups of Direct Products that Satisfy the Frattini Argument.

A subgroup $S$ of a group $G$ satisfies the Frattini Argument in $G$ if for all normal subgroups $N$ of $G$, we have $G$ equal to the product of $N$ with $N \cap S$. In this talk, we will consider subgroups of direct products of finite solvable groups which satisfy the Frattini Argument. For a subgroup $U$ of such a direct product, $G_1 \times G_2$, we will examine the structure of $\pi_i(G_i)/(U \cap G_i)$ where $i = 1, 2$ and $\pi_i$ is the natural projection of $G_1 \times G_2$ onto $G_i$. (Received September 29, 2004)