1067-20-1454Joseph Evan\* (josephevan@kings.edu), Department of Mathematics & Computer Science,<br/>King's College, 133 N. River St., Wilkes-Barre, PA 18711. Injectors in Direct Products of Finite<br/>Solvable Groups.

In their book, "Finite Solvable Groups," Doerk and Hawkes ask if it is possible to characterize injectors for Fitting Sets in Finite Solvable Groups without reference to Fitting Sets. Recent work of Dark and Feldman, and Dark, Feldman, and Perez-Ramos provides a positive answer to this question.

Also recently, several authors have contributed to a project of characterizing subgroup properties in direct products of groups. In particular, nice characterizations have been found for normally embedded subgroups and subgroups satisfying the strong Frattini argument.

Given that in a finite solvable group, the set of injectors is between the set of normally embedded subgroups and the set of subgroups satisfying the strong Frattini argument with respect to set containment, there is potential for finding a nice condition that would characterize injectors in direct products of finite solvable groups. The purpose of this talk will be to provide results which describe when certain types of subgroups of direct products are injectors and discuss some necessary conditions for subgroups of direct products to be injectors. (Received September 21, 2010)