

1067-20-1960

Dandrielle Lewis* (dlewis5@binghamton.edu), Department of Mathematical Sciences,
Binghamton, NY 13902-6000. *Characterizing Containment of Subgroups in a Direct
Product*. Preliminary report.

Given a direct product of groups G and H and information on the subgroups of G and H , what can one say about the subgroup structure of $G \times H$? In 1889, Edouard Goursat proved a theorem that allows us to obtain the subgroup structure of a direct product by examining the sections of the direct factors. In this talk, we will discuss this result, characterize containment of subgroups in a direct product of groups and apply this result to examine the lattice of $Q \times Q$. (Received September 22, 2010)