Meeting: 1004, Bowling Green, Kentucky, AMS CP 1, Session for Contributed Papers

1004-22-204 **Laurie A. Edler*** (laurie.edler@gcsu.edu), CBX 017, Department of Mathematics & Computer Science, GC&SU, Milledgeville, GA 31061, and **Victor Schneider**. *Path-Connected Group Extensions.*

Let N be a normal subgroup of a path-connected topological group (G, t). In this paper, the authors consider the existence of path-connectedness in refined topologies in order to address the property of maximal path-connectedness in topological groups. In particular, refinements on t and refinements on the quotient topology on G/N are studied. The preservation of path-connectedness in extending topologies and translation topologies is also considered. (Received January 24, 2005)