1060-05-75 **Dave Witte Morris***, Dept of Math and Comp Sci, University of Lethbridge, Lethbridge, AB T1K 3M4, Canada. Survey of hamiltonian cycles in Cayley graphs. Preliminary report.

It was conjectured about 40 years ago that every connected Cayley graph has a hamiltonian cycle. This is easy to prove for Cayley graphs on abelian groups, but we are nowhere near a proof of the general case. The talk will discuss some of the progress that has been made, and some of the many open problems. (Received March 20, 2010)