1067-20-1392   **Daniel Groves***, Dept MSCS, 851 S. Morgan St., Chicago, IL 60607, and **Henry Wilton**, IL.
Conjugacy classes of solutions to systems of equations over hyperbolic groups.

There is an algorithm to decide whether or not a system of equations and inequations over a torsion-free hyperbolic group has infinitely many conjugacy classes of solutions.

Time-permitting, I will discuss applications to the algorithmic study of limit groups over torsion-free hyperbolic groups. (Received September 20, 2010)