## 1154-20-1609 **Petr Vojtěchovský\*** (petr@math.du.edu), Department of Mathematics, University of Denver, 2390 S York St, Denver, CO 80208. A large scale automated deduction project in nonassociative algebra. Preliminary report.

An easy theorem in group theory states that a group modulo its center is isomorphic to the group of inner automorphisms. The ultimate goal of this project is to establish a generalization of the above result in the theory of loops. I will briefly survey results obtained by traditional means and then focus on recent developments in which automated deduction plays a key role. This is a large scale project from computational perspective and joint work with Michael Kinyon, J.D. Phillips and Robert Veroff. (Received September 16, 2019)