1043-20-177     **C E Ealy Jr.*** (`ealy@wmich.edu`), Professor Clifton E. Ealy jr, Department of Mathematics, Western Michigan University, Kalamazoo, MI 49008. *On the automorphism group of a finitely generated free loop. Preliminary report.* Preliminary report.

Informally, a loop is a "group" without associativity or more precisely a quasi group with identity. In a 1924 paper, Jakob Nielsen determined generators and relations for a finitely generated free group. In two papers in 1951 and 1953, Trevor Evans studied free loops and determined the automorphism group of a free loop on one generator. We discuss the automorphism group of a finitely generated free loop based on the above papers. (Received August 26, 2008)