

ABSTRACT

In this thesis we have combined the ideas of Groups, transversals and loops. The main focus of the thesis is about the ideas of loop theory. We have tried to divide the loops in two categories as left and right loops. The most famous types of loops as Bol loops and Moufang loops are also discussed in this thesis. How a left loop acts when it possesses the left Bol property is thoroughly discussed. We have also discussed that how a left loop as well as a loop can become a Moufang loop. The ideas of autotopism, pseudoautotopism, semi-automorphism are also discussed in this thesis, which help us for the thorough study of loops having the right Bol property. Every transversal of the coset space is a left loop with left identity under certain binary operation. In the end we have extended the study of a class of automorphic loops, discussed in [20], and characterized Moufang and Bol loops within this class of loops.