NORMAL SUBGROUP AS A CATALYST TO NANO TOPOLOGY

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Abstract: The aim of this paper is to evolve a nano topological structure from a finite group and here we define the nano approximations via normal subgroup of a group and its properties were also discussed based on choice of Normal subgroups. Algebraically and topologically, structural equivalences are based on the two renowned maps isomorphism between groups and homeomorphism in topological spaces. This induces us to create a link between groups and Nano topology induced by group which in turn has its own impact on well known theorems such as Fundamental theorem of homomorphism on groups and Second isomorphism theorem.

Keywords and Phrases: Normal subgroup, cosets, Nano topology induced by group, Fundamental theorem of homomorphism in Nano topological spaces.

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1. Introduction

The abstract concept of a finite group [7] was first formulated by A. Cayley. Lellis Thivagar et al [10] interjected a nano topological space with respect to a subset X of an universe which is defined in terms of lower and upper approximations