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Nano Generalized Topology

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Abstract : Rough set theory is a recent approach for reasoning about data. It has achieved a large amount of applications in various real-life fields. The main idea of rough sets corresponds to the lower and upper set approximations. These two approximations are exactly the interior and the closure of the set with respect to a certain topology on a collection U of imprecise data acquired from any real-life field. The base of the topology is formed by equivalence classes of an equivalence relation E defined on U using the available information about data. The theory of generalized topology was studied by Cs´asz´ar. It is well known that generalized topology in the sense of Cs´asz´ar is a generalization of the topology on a set. On the other hand, many important collections of sets related with the topology on a set form a generalized topology. The notion of Nano topology was introduced by Lellis Thivagar, which was defined in terms of approximations and boundary region of a subset of an universe using an equivalence relation on it. The purpose of this paper is to introduce a new generalized topology in terms of rough set called nano generalized topology

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