

Read PDF On The Intuitionistic Fuzzy Metric Spaces And The

Also we define topologically complete intuitionistic fuzzy metrizable spaces and prove that any G_δ set in a complete intuitionistic fuzzy metric spaces is a topologically complete intuitionistic fuzzy metrizable space and vice versa. Finally, we define intuitionistic fuzzy normed spaces and fuzzy boundedness for linear operators and so we prove that every finite dimensional intuitionistic fuzzy normed space is complete.

On the intuitionistic fuzzy topological spaces - ScienceDirect

On the intuitionistic fuzzy topological spaces 1. Preliminaries. The theory of fuzzy sets was introduced by Zadeh in 1965 [19]. After the pioneering work of Zadeh,... 2. Precompact intuitionistic fuzzy metric spaces. Definition 2.1 Let $(X, M, N, *, \diamond)$ be an intuitionistic fuzzy metric... 3. ...

On the intuitionistic fuzzy topological spaces - ScienceDirect

A new complete intuitionistic fuzzy metric space is proposed to investigate the existence and uniqueness of intuitionistic fuzzy solutions for these problems.

(PDF) Intuitionistic fuzzy metric space - ResearchGate

In this paper we give some properties of a class of intuitionistic fuzzy metrics which is called strong. This new class includes the class of stationary intuitionistic fuzzy metrics. So we examine the relationship between strong intuitionistic fuzzy metric and stationary intuitionistic fuzzy metric.

On strong intuitionistic fuzzy metrics

Some properties of complete intuitionistic fuzzy metric spaces Definition 4.1. Let $(X, N, M, *, \diamond)$ be an intuitionistic fuzzy metric space. A collection $\{F_n\}_{n \in \mathbb{N}}$ is said to have... Remark 4.2. A nonempty subset F of an intuitionistic fuzzy metric space X has intuitionistic fuzzy diameter zero if ...

Intuitionistic fuzzy metric spaces - ScienceDirect

An intuitionistic fuzzy metric space is a 5-tuple $(X, M, N, *, \diamond)$ such that X is a (nonempty) set, $*$ is a continuous t-norm, \diamond is a continuous t-conorm and M, N are fuzzy sets on $X \times X \times (0, \infty)$ satisfying the following conditions, for all $x, y, z \in X, s, t > 0$: (a) $M(x, y, t) + N(x, y, t) \leq 1$; (b) $M(x, y, t) > 0$;

A note on intuitionistic fuzzy metric spaces - ScienceDirect

Then $(X, M_d, N_d, *, \diamond)$ is a complete intuitionistic fuzzy 2-metric space and it is the unique

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intuitionistic fuzzy 2-metric completion of $(X, M, N, *, \diamond)$ (up to isometry). Indeed, since there is an isometry f from (X, d) onto a dense subspace of (\tilde{X}, \tilde{d}) and the topologies generated by d and (M, N) coincide, $f(X)$ is dense in $(\tilde{X}, M, N, *, \diamond)$.

Intuitionistic fuzzy 2-metric space and its completion ...

An intuitionistic fuzzy metric space is a 5-tuple $(X, M, N, *, \diamond)$ such that X is a (nonempty) set, $*$ is a continuous t-norm, \diamond is a continuous t-conorm, and M, N are fuzzy sets on $X \times X \times (0, 1)$ satisfying the following conditions, for all $x, y, z \in X, s, t > 0$:

Remarks to "on strong intuitionistic fuzzy metrics"

Abstract. New methods for measuring distances between intuitionistic fuzzy sets and/or interval-valued fuzzy sets, based on the Hausdorff metric, are suggested. The proposed new distances are straightforward generalizations of the well known Hamming distance, the Euclidean distance and their normalized counterparts. Previous article.

Distances between intuitionistic fuzzy sets and/or ...

Park [24] in 2004, using the idea of intuitionistic fuzzy sets defines the notion of intuitionistic fuzzy metric space with the help of continuous t-norm and t-conorm as a generalization of fuzzy metric space due to George and Veermani ([11, 12]).

ON SOME COMMON FIXED POINTS THEOREMS IN INTUITIONISTIC ...

Finally, we define intuitionistic fuzzy normed spaces and fuzzy boundedness for linear operators and so we prove that every finite dimensional intuitionistic fuzzy normed space is complete. In this paper, we define precompact set in intuitionistic fuzzy metric spaces and prove that any subset of an intuitionistic fuzzy metric space is compact if and only if it is precompact and complete.

On the intuitionistic fuzzy topological spaces - NASA/ADS

Although topological structure of an intuitionistic fuzzy metric space $(X, M, N, *, \diamond)$ coincides with the topological structure of the fuzzy metric space $(X, M, *)$ ([2]), study of common fixed ...

On the Intuitionistic fuzzy topological (metric and normed ...

An intuitionistic fuzzy set (IFS) in is defined by the form with the condition, where the function denotes the degree of membership of, and denotes the degree of nonmembership of. For any, is called the intuitionistic fuzzy index of the element to the IFS for representing the degree of uncertainty.

Definition 2. (Atanassov [6, 7]).

Belief and Plausibility Measures on Intuitionistic Fuzzy ...

In this case (M, N) is called an intuitionistic fuzzy 2-metric on X and we denote it by $(M, N)_2$. The functions $M(x, y, z; t)$ and $N(x, y, z; t)$ denote the degree of nearness and the degree of non-nearness between x, y and z with respect to t , respectively. Remark 2.1. In an intuitionistic fuzzy metric space $(X, M, N, *, \cdot)$, $M(x, y, z; \cdot)$ is non-decreasing and $N(x, y, z; \cdot)$

Baire's and Cantor's theorems in intuitionistic fuzzy 2 ...

Then is called an intuitionistic fuzzy metric on X . The function M and N denote the degree of nearness and the degree of nonnearness between x, y, z and respect to t , respectively. Remark 1. In intuitionistic fuzzy metric spaces $(X, M, N, *, \cdot)$, M is nondecreasing and N is nonincreasing for all $t > 0$. 3. Main Results

Semigroup Actions on Intuitionistic Fuzzy Metric Spaces

In Section 3, we define a Hausdorff topology on this intuitionistic fuzzy metric space and show that every metric induces an intuitionistic fuzzy metric. Further we introduce the notion of Cauchy sequences in an intuitionistic fuzzy metric space and prove the Baire's theorem for intuitionistic fuzzy metric spaces.

Intuitionistic fuzzy metric spaces - PDF Free Download

Every fuzzy metric space $(X, M, *)$ is an intuitionistic fuzzy metric space of the form $(X, M, 1-M, *, \cdot)$ such that t -norm $*$ and t -conorm \cdot are associated [11], i.e. $x \cdot y = 1 - ((1 - x) * (1 - y))$ for any $x, y \in X$.

On some results in intuitionistic fuzzy metric spaces ...

Every fuzzy metric space $(X, M, *)$ is an intuitionistic fuzzy metric space of the form $(X, M, 1 - M, *, \cdot)$ such that t -norm $*$ and t -conorm \cdot are associated (Lowen [20]), i.e., $x \cdot y = 1 - ((1 - x) * (1 - y))$ for all $x, y \in X$.