

Fuzzy Logic - A New Direction. The Concept of f-Validity

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Abstract

Science deals not with reality but with models of reality. In this perspective, fuzzy logic may be viewed as a system of concepts and techniques aimed at construction of models of reality which are better than those which can be constructed through the use of methods based on bivalent logic and bivalent-logic-based probability theory.

What lies beyond the boundaries of fuzzy logic? An uncharted territory which is explored involves settings in which precision is not an attainable objective. In such settings, it is necessary to retreat from precision and accept what may be called f-validity. The concept of f-validity has wide-ranging ramifications.