

## INTRODUCING NEW PARADIGMS FOR ALGEBRAIC AND INTELLIGENT-SYSTEM RESEARCH

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**ABSTRACT.** Scientific research is not only ruled by logical laws, but also depends on languages and formalisms. It is the main aim of this article to structure formalism and languages as algebraic constructions, and state suitability and consistency criteria to select the more adequate for every scientific area. Consequently, analyzing the suitability of a formalism can be done by algebraic procedures. Likewise, new restricted logical connectives are defined to support results under consistent mathematical constructions.

Some new formalisms are also introduced. However, due to the vastness of this field, this article is of an introductory nature and must be considered as a starting point and an invitation to work on this fundamental scientific research.

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