10. Conclusions and topics for further research

We embedded fuzzy quantities into a vector space (with a different unary minus). This allows to find possible solutions of systems of linear equations in the larger vector space, using standard methods of linear algebra. Then it remains to find to each variable the corresponding fuzzy quantity (if it exists). This step is always the same for each variable, independently of the complexity of the original system of equations.

For particular cases like trapezoidal fuzzy intervals or triangular fuzzy numbers, simpler algorithms can be formulated.

It is desirable to extend the results to (systems of) non-linear equations, including multiplication and division of fuzzy quantities.

The same principle allows also an extension to more dimensions, i.e., to fuzzy vectors.

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