

# Fuzzy stochastic differential equations – A tool for stochastic systems with imprecise values

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To handle dynamics of systems operating in random and vague/fuzzy environment, we propose to consider fuzzy stochastic differential equations. This constitutes a new field of research in modeling uncertain phenomena. We examine equations whose solutions have increasing and decreasing fuzziness in their values. The existence and uniqueness of solutions is investigated. Several examples in modeling population growth are analyzed to illustrate introduced theory.

## References

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