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A stochastic differential equation (SDE) is a differential equation in which one or more of the terms is a stochastic process, resulting in a solution which is also a stochastic process. SDEs are used to model various phenomena such as unstable stock prices or physical systems subject to thermal fluctuations. Typically, SDEs contain a variable which represents random white noise calculated as the derivative of Brownian motion or the Wiener process. However, other types of random behaviour are po
STOCHASTIC FUZZY DIFFERENTIAL EQUATIONS WITH AN APPLICATION
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The topic of fuzzy stochastic differential equations with solutions that are the fuzzy stochastic processes with continuous sample paths is very new and its foundations are contained in . Such equations generalize both the deterministic fuzzy differential equations and the crisp stochastic differential equations . They join together some features of each kind of mentioned equations to offer a mathematical apparatus appropriate in description of dynamic systems evolving in fuzzy and ...

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