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Research Trends and Applications of Chaotic Systems in Engineering



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Abstract

Chaos theory is a multi-disciplinary branch of computational sciences dealing with nonlinear dynamical systems undergoing chaotic behavior. Chaotic dynamical systems are highly sensitive to changes in their initial states. In this talk, I shall review some classical chaotic systems like Lorenz system, Chen system, etc. I shall also highlight some of the recent chaotic systems I have discovered. Then I shall highlight the applications of chaos theory in various branches of computational sciences such as encryption, secure communication, circuit design, FPGA, etc.