INSPEM WEEKLY SEMINAR

UPM UNIVERSITI PUTRA MALAYSIA
BERILMU BERBAKTI

23/2019

Date & Time

Friday , 28th June 2019 @ 3.15 pm

Venue

Al-Farabi Seminar Room, Second Floor, INSPEM

Presenter

Dr. Santo Banerjee

Research Fellow
Laboratory of Cryptography, Analysis & Structure, INSPEM

Topic

Complexity and Chaos in Dynamical Systems

Abstract

Analysis of complexity is one of the most effective tools to study nonlinear phenomena. Dynamical complexity is generally investigated by computing the entropy of the dynamics. Entropy, in information theory point of view, measures the amount of uncertainty inside the dynamics. Several entropy measures such as Shannon entropy, Gibbs entropy, Kolmogorov-Sinai entropy, etc. are very effective to quantify the information present in classical models. In this note, we discuss the basics of chaos theory and effect of complexity on nonlinear models, derived from real world phenomena.