

Area Seminar

Title Some results using simple coupled maps

Date and
Time 21/01/2010 16:00:00

Speaker Some results using simple coupled maps
Professor
University of Mumbai

Area Theoretical Physics

Venue Room No. 469

Abstract In this seminar we discuss three results dealing with some simple nonlinear coupled maps. First, we show that the stationary density of the coupled tent map has a fractal character. Then we introduce a new method suited for the global analysis of synchronization in a coupled nonlinear system. We demonstrate it using coupled tent maps. Finally, we study coupled logistic maps whose coupling strengths change according to a learning rule. We study the effect of this learning on the network topology. This result has relevance to Neuroscience.