



Mathematical Neuroscience SEMINAR

MATHEMATICAL NEURAL NETWORKS MODELS

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In this talk, we will give a brief explanation about neural networks models. As it is well known that neural networks are simplified models of neural processing in the brain and they have many application areas such that investment analysis, signature analysis, process control, marketing, image processing, neurobiology, optimization, and pattern recognition etc.

In the first part of the talk, mathematical neural networks models such as Cohen Grossberg Neural Networks, Hopfield Neural Networks, Shunting Inhibitory Neural Networks and Bidirectional Associative Memory Neural Networks will be discussed. The derivation and interpretation of each model and the differences between them will be explained. In the second part, we talk about their equilibrium points and stability and which methods are used to investigate these qualitative properties.

Date: Thursday, June 7, 2012

Time: 17:00

Place: M-203 Seminar Room, Department of Mathematics, METU

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