TENTATIVE PROGRAMME

WORKSHOP ON CONTROLLING DYNAMICS IN MATHEMATICAL MODELS OF REAL NEURONS

20 – 21 June 2017
Al-Farabi Seminar Room, INSPEM, UPM

20 June 2017 (Tuesday)

Time	Programme
08:30 am – 08:50 am	Registration
08:50 am – 9:00 am	Opening remark
9:00 am – 10:30 am	Controlling Neurons: Biological and Bioengineering Prerequisites
10:30 am – 10:45 am	Break
10:45 am – 12:15 pm	Alternative Mathematical Models for Controlling Neurons: Pros and Cons. Hodgkin-Huxley Mathematical Neuron
12:15 pm – 2:30 pm	Photography Session Break
2:30 pm – 4:00 pm	Optimal and Sub-Optimal Feedback Control Algorithms. Speed Gradient Algorithm vs Target Attractor Feedback
4:00 pm	End of session

21 June 2017 (Wednesday)

Time	Programme
09:00 am – 10:30 am	Specific of Control Algorithms in High Dimensional Nonlinear Systems. Main Features of Control in Hodgkin-Huxley Model
10:30 am – 10:45 am	Break
10:45 am – 12:15 pm	Control in Chains of Hodgkin-Huxley Neurons
12:15 am – 2:30 pm	Break
2:30 pm – 4:00 pm	Application of Control in Neural Dynamics: Achievements, Perspectives and Discussion
4.00 pm	Closing