

di Ingegneria Industriale



Perspective Lecture

Tools for Analyzing and Controlling Complex Biological Systems

Prof. Edward Boyden (Co-Director, MIT Center for Neurobiological Engineering)

Monday, October 7th, 2019, 14:30

Aula Magna, Palazzo Bo Via VIII Febbraio, 2 - Padova

14:30 Registration of participants

15:00 Welcome and introduction Prof. Stefania Bruschi, DII Director

15:15 Perspective Lecture **Tools for Analyzing and Controlling Complex Biological Systems** Prof. Ed Boyden

16:15 Discussion

16:45 **Aperitif**

Participation is free, subject to prior on-line registration at http://www.dii.unipd.it by October 6th, 2019

This initiative is part of a series of Perspective Lectures organized by the Department of Industrial Engineering with the aim to foster the development and exchange of knowledge in the academic, research and entrepreneurial fields.

Prof. Boyden will discuss the technologies required to observe, control and understand complex biological systems, such as the brain, with great precision, across extended spatial and temporal scales. His research has led to the discovery of new molecular principles that have led to the development of new technologies such as Expansion Microscopy and Optogenetic tools.



Ed Boyden is a Y. Eva Tan Professor in Neurotechnology at Massachusetts Institute of Technology (MIT); Leader of the Synthetic Neurobiology Group; Professor, MIT Media Lab and McGovern Institute, Departments of

Biological Engineering and Brain and Cognitive Sciences; Co-Director, MIT Center for Neurobiological Engineering. He is the recipient of several awards and honors such as the Breakthrough Prize in Life Sciences and Canada Gairdner International Award.

His group invents and applies, technologies that enable the systematic mapping and repair of the brain and other complex biological systems.

Organizing Committee:

Prof. Elisa Cimetta, Prof. Stefania Bruschi and Prof. Patrizia Garengo