

Dynamical Systems Seminar

Please, note that coffee is served **before** the talk.

Date. June 11, 11h30

Place. Room M031

Speaker. Antonio Politi¹ (University of Aberdeen, UK)

Title. Dynamical behaviour of neural networks

Abstract. The onset of collective motion in networks of pulse-coupled oscillators will be reviewed with reference to various setups (global coupling, as well as sparse networks). The general properties of the microscopic and macroscopic dynamics are also illustrated.

Remark. Coffee is served before the talk (11h00 - 11h30)

¹Antonio Politi is currently Sixth Century Chair in Physics of Life Sciences at University of Aberdeen (UK) and he is also visiting professor at Strathclyde University (UK). Antonio Politi graduated in Physics in 1978 at the University of Florence (Italy). In 1981 he was hired at the National Institute of Optics (INO) in Florence as a Resercher, where he was later (1992) appointed Chief Researcher and then (2005) Director of Research. He received several awards, among which we highlight the international awards *Gutzwiller Prize* (2004) and *Humboldt Prize* (2010). Antonio Politi is the author of several scientific publications, including books, book chapters and more than 160 publications in peer-review journals. He is also member of the editorial board of some international mathematical journals. His current scientific interests range from non-equilibrium thermodynamics to neurocomputation, and nonlinear-dynamics in general. Antonio Politi's homepage is <http://www.fi.isc.cnr.it/users/antonio.politi/>