

Lucilla de Arcangelis, Second University of Naples, Italy – *On the nature of correlations in the brain*

Lucilla de Arcangelis is a professor of Theoretical Physics at the Department of Industrial and Information Engineering of the Second University of Naples (Italy). She received a Ph.D. in Physics from the Boston University.

She has been a visiting scientist at the University of Cologne and the CEA in Saclay, she obtained in 1990 a CNRS position at the ESPCI in Paris and in 1993 a Faculty position in Italy. Her research involves application of theories of statistical physics to natural phenomena and biological networks. She has been investigating a wide range of subjects from percolation, fractals, cellular automata to spin glasses, models for fracture and gelation. More recently, she has focused on statistical properties of earthquake and solar flare occurrence, together with neuronal activity on complex networks. She has authored more than 130 publications and is member of the IUPAP C3 Commission.