Attractors as informational structures. Application to global brain dynamics and the problem of human consciousness.

José Antonio Langa Rosado.

Universidad de Sevilla.

In the Integrated Information Theory (IIT) of consciousness, information is defined as a crucial notion, so that, given a state, it possesses power, from an intrinsic perspective, with respect to past and future states. This notion of information is well characterised as structured information. Very recently, Informational Structures have been introduced as global attracting networks as a dynamical system approach for a mathematical description of IIT. In this talk we will describe Informational Structures and their related Informational Fields, their applications to Theoretical Neuroscience and some possible clinical implications.