

Structural and functional neural correlates of emotional responses to music

Gianluca Susi

Laboratory of Cognitive and Computational Neuroscience

Facultad de Informática

Sala de Grados - Viernes 15 de Diciembre de 2017 - 09:00

Entrada libre hasta completar el aforo

Resumen:

The sophisticated signal processing techniques developed during last years for structural and functional imaging methods allow us to detect abnormalities of brain connectivity in brain disorders with unprecedented detail. Interestingly, recent works shed light on both functional and structural underpinnings of musical anhedonia (i.e., the individual's incapacity to enjoy listening to music). On the other hand, computational models based on brain simulation tools are being used more and more for mapping the functional consequences of structural abnormalities. The latter could help to better understand the mechanism that is impaired in people unable to derive pleasure from music, and formulate hypotheses on how music acquired reward value. The presentation gives an overview of today's studies and proposes a possible simulation pipeline to reproduce such scenario.

Sobre Gianluca Susi:

Gianluca Susi received a PhD in Sensor and Learning Systems Engineering from the University of Rome "Tor Vergata" in 2012. Nowadays, he is doing research in the UCM-UPM Laboratory of Cognitive and Computational Neuroscience of CTB (Madrid). He is also adjunct professor of Electrical Circuits and coordinating member of the "Master programme in Audio Engineering" at the University of Rome "Tor Vergata". His research is currently aimed to the development of spiking/synaptic brain models in order to reproduce MEG connectivity in health and disease.