

Daniel Marti

Born (1976) and educated in Barcelona, Spain.

BS (1999) and MS (2001) in Physics from Universitat Autònoma de Barcelona

PhD (2008) in Computational Neuroscience from Universitat Pompeu Fabra; advisor: Prof Gustavo Deco. Marti's thesis research involved computational modeling of decision-making processes using cell-based and mean-field models of stochastic neuronal networks.

Postdoc research with Prof John Rinzel will focus on the development and analysis of computational models for perceptual and cognitive neurodynamics. Applications will include neuronal network models for perceptual multistability with random alternations (as when viewing the Necker cube) and for perceptual grouping. The framework will involve competition between neural attractors that may allow for merging of attractors as in grouping and ultimately to formulations for problem-solving, as puzzle pieces coming together mentally.