Vision Modeling Seminar

February 20 (Monday), 2017, 13:30-14:30 2017年2月20日(月) 13:30-14:30

Seminar Room 822, Nakano Campus, Meiji University 明治大学中野キャンパス 8 階 822 セミナー室

2D Numerical Simulations of Optical Illusions

François Desquilbet MIMS Visiting Researcher École normale supérieure de Paris

Recently Sushida, Kondo, Sugihara and Mimura have proposed a new differential equation model of the human vision system in order to understand the mechanism of optical illusions. This is a macroscopic model based on the known retinal cell neural network. It explains two mutually contradicting phenomena called lightness contrast and lightness assimilation. They numerically solved this model to understand brightness optical illusions in one dimension. The purpose of my talk is to numerically study this model in two dimensions, comment on the value of control parameters and show some simulations of optical illusions.

Organizer: MIMS Collaborative Research Project for Psychological and Mathematical Approaches to Visual Illusion

Contact: Kokichi Sugihara (MIMS),

tel: 03-5343-8366, e-mail: kokichis@meiji.ac.jp

主催:MIMS錯視の心理的・数理的アプローチの融合

研究プロジェクト

連絡先:杉原厚吉 (先端数理科学インスティテュート)

電話:03-5343-8366,メール:kokichis@meiji.ac.jp