The School of Psychology invites you to a Special Seminar with

Dr. Ilan Dinstein
The Department of Psychology
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On:

Autism: “noisy” and “under-connected” brain?

Thursday, January 05, 2012, 10:00, Faculty club, IDC Herzliya Campus

Autism: “noisy” and “under-connected” brain?
Over the last decade it has become clear that autism is not caused by the dysfunction of a particular place in the brain or by an abnormality in a single gene or molecular mechanism. Instead, it seems that many genetic and molecular mechanisms cause numerous anatomical and functional abnormalities in the brain, leading to the development of autism. Despite the large heterogeneity in both behavior and biology, it may still be possible to identify a set of physiological characteristics that are common across different forms of autism. In his seminar Dr. Dinstein will focus on two such characteristics and show neuro-imaging (fMRI) data suggesting that brains of individuals with autism exhibit weaker long-range connectivity (“under-connected”) and weaker neural response reliability (more “noisy”). These physiological characteristics are in agreement with the recent description of autism as a disorder of synaptic development, maturation, and stabilization. They suggest a meaningful theoretical framework that can account for the vast majority of behavioral, genetic, molecular, physiological, and clinical findings about autism. This theoretical framework offers many useful predictions that can be tested empirically in both behavior and biology.