Fostering learning through emotions
virtual reality and videogames

Symposium organized by the Swiss Center for Affective Sciences
NCCR Research Focus on Emotion, Videogames and Virtual Reality

University of Geneva Thursday 13th (evening 6-8pm) & Friday 14th 2013 (whole day until 6pm)
U. of Geneva (Unimail) - 40 Bd du Pont d’Arve - Rooms MR280 (13th) and MR070 (14th) - ground floor

Immersive environments, from videogames to iMAX have become ubiquitous in our society. While a growing body of research has highlighted the potential power of such new technologies for health and learning impact, most do not address fundamental constructs such as attention, emotion regulation or prosocial competencies. The goal of this symposium will be to gather researchers from psychology, neuroscience, affective computing, and game design with a strong interest in the following issues: 1) how can we harvest and evaluate motivation in immersive environments, and how relevant is it to learning; 2) how can physiological states and emotional behaviors be monitored online to inform game/VR engines; 3) how games and VR can be used to train affective competences.

Thursday June 13th
6:00 pm 7:00 pm Thursday evening kick-off reception
7:00 7:45 Measuring & Training Prosocial Motivation & Emotions using fMRI, games & Virtual Reality
Tania Singer (MPI Leipzig, Germany)

Friday June 14th
8:30 am 9:00 am Reception & Welcome Coffee
9:00 9:35 Action video games as exemplary learning tools
Daphne Bavelier (U. Geneva/U. Rochester, Switzerland/US)
9:45 10:20 A Heisenberg type of problem? Learning and Flow, in games and psychophysiology
Ben Cowley (U. Helsinki, Finland)
10:30 10:50 Coffee break
10:50 11:25 Curiosity-driven learning in robots and humans
Pierre-Yves Oudeyer (INRIA, France)
11:35 12:10 Roles of narrative in learning games: from educational adventure games to highly interactive drama with learning purposes
Nicolas Szilas (TECFA-FPSE, University of Geneva, Switzerland)
12:10 12:40 Morning talks discussion (chaired by Daphne Bavelier)
12:40 1:50 pm Lunch break
1:50 2:25 Towards full-body agency within immersive virtual reality
Ronan Boulic (EPFL, Switzerland)
2:35 3:10 Body Movement and touch behaviour as means to recognize and enhance affective experience in game technology
Nadia Berthouze (UCL, UK)
3:20 3:40 Coffee break
3:50 4:25 Exploring emotions and morality through immersive virtual reality
Sylvia Pan (UCL, UK)
4:35 5:10 Virtual Reality as tool for psychotherapy of anxiety disorder and for psychotherapy research
Andreas Mühlberger (University of Wurzburg, Germany)
5:20 5:50 Afternoon talks discussion (chaired by Daphne Bavelier)
5:50 6:00 Closing Remarks – David Sander (U. Geneva)