PhD position on the neural coupling between episodic autobiographical memory and self-consciousness

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The Laboratory of Cognitive Neuroscience, directed by Olaf Blanke (https://www.epfl.ch/labs/lnco/), has an open position for a PhD student on the neural mechanisms coupling episodic autobiographical memory and self-consciousness using the methods of virtual reality (VR) and fMRI.

Specifically, the project plans to investigate how the integration of online body-related signals not only impacts self-consciousness, but how these signals impact the encoding and retrieval of autobiographical memories. The research is based on our past work on self-consciousness (Lenggenhager et al., Science 2007; Ionta et al., Neuron 2011; Blanke et al., Neuron 2015) and will employ and further develop a recently developed VR platform for episodic memory (Brechet et al., Plos1 2019) and apply it to fMRI using laboratory-controlled virtual events that will be fully adapted to fMRI.

The ideal candidate should have a Master's degree (or equivalent degree) in computer science, neuroscience, biology, psychology, or engineering, be strongly motivated with a keen interest in cognitive-systems neuroscience and neuroimaging/signal analysis. (1) A strong neuroimaging background, especially in fMRI, (2) previous research experience in the experimental psychology of memory (psychophysics), or (3) strong VR programming are a plus.

The PhD candidate will be enrolled in the EPFL PhD program Neuroscience (next deadline: mid-November 2019; see http://phd.epfl.ch/neuroscience-openings).