

LE CENTRE DE SCIENCES COGNITIVES

Invite

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LUTIN – UPMC

qui donnera une conférence le

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Eye movements and pupillometry in cognitive psychology

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Cognitive psychologists study mental processes that are seldom directly observable. Phenomena such as attention, memory and problem solving are indirectly examined by evaluating the behavior of people while performing a given task. Eye movements constitute one of the very first behaviors that develop since early childhood. Being tightly locked to attention, they offer useful and measurable markers of what a person is attending to, at any given instant. Similarly, small-scale pupil diameter variations follow the presentation of sensory, cognitive and emotional stimuli. Remote eye trackers can measure these activities with high spatial-temporal accuracy and in a relatively unobtrusive manner, giving researchers great opportunities.

In this talk I will introduce the basics of eye movements and pupillometry. Important findings in cognitive psychology research using these techniques will be outlined. The talk is intended to anyone interested in eye movements, as well as to any researcher interested in adding eye movements to traditional methods in her/his field. It is argued that eye movements do not make any magic a priori, rather they can provide valuable information on ongoing mental processes when careful studies are carried out.