

# Breaking into the attentional mechanisms underlying cognition via the science of pupil

Wednesday, September 25, 2024 9:00 AM (1h 30m)

Every image we see first enters our brain through the pupil. This dynamic window in the iris regulates its opening and closing as a function of luminance and, importantly, psychosensory stimulation (Loewenfeld, 1958). During the last decades, the birth and development of pupillometry techniques investigating this psychosensory response has shed light on the cognitive underpinning of a vast range of mental processes. In this symposium, a chorus of young and promising, early career researchers will discuss the most recent advances in the application of this psychophysiological measure. The first talk will present the application of pupillometry to the study of preverbal and verbal populations, to the processing of visual, auditory and, tactile information including linguistic and music stimuli (Russo et al., 2023). The second talk will illustrate the opportunities and challenges of applying pupillometry to the study of object concepts in infancy (Mayer et al., 2023). The third talk will move toward the assessment of early theory of mind and social cognitive processes in preverbal infants (Pflüger et al., 2024). Lastly, the fourth contribution will shed light on pupillometry as a method for assessing cognitive effort during the administration of a verbal memory span test in the presence of noise (Gheller et al., 2024). In summary, this symposium will discuss the important insights pupillometry brought to experimental research in the last decade, also considering implications and future challenges regarding different experimental techniques, cognitive and sensory domains, and developmental stages.

**If you're submitting a poster, would you be interested in giving a blitz talk?**

**If you're submitting a symposium talk, what's the symposium title?**

**If you're submitting a symposium, or a talk that is part of a symposium, is this a junior symposium?**

Yes

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