POSTERS: MULTISENSORY PROCESSING I

◆ **Spatial limits for audiovisual unity assumption**

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The unity assumption hypothesis states that the more information on amodal properties different signals share, the more likely it is that we perceive them as originating from a common source or object (Welch, 1999). Temporal coincidence has been the preferable amodal property to manipulate in unity assumption studies (Vatakis and Spence, 2007), and the studies that manipulate spatial coincidence often use misaligned audiovisual stimuli in order to check for crossmodal effects, as the ventriloquism effect (Hairston et al., 2003). Starting from the measurement of participants' auditory location capability, we proceeded finding the minimum angular disparity between two Point-Light Walkers (PLWs) that allowed participants' a correct audiovisual binding between visual and auditory co-located stimuli. In this task, participants had to discriminate which PLW was producing the auditory steps that were co-located with only one of the PLWs (right/left answer). We had different conditions regarding stimuli distance and stimuli familiarity. The data allowed us to accurately define absolute spatial thresholds for a correct audiovisual unity assumption and, furthermore, we could also explore the relation between those limits, the stimuli distance, and the auditory spatial resolution of each participant.

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