The role of the vestibular system in postural and piloting tasks

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ABSTRACT:
It has long been known that severe vestibular damage causes postural impairments, but less is known about the role of the vestibular system who are “healthy.” Furthermore, little is known about the specific vestibular cues (e.g., tilt vs. translation vs. rotation) that contribute to postural control. In this presentation, I will discuss our recent studies that examine the role of vestibular cues in postural control in subjects with no known vestibular deficits. I will also present our recent findings showing that variations in vestibular function among young, healthy subjects are correlated with performance in a simplified piloting task. Finally, I will interpret these results in terms of the hypothesis that sensory neural noise impairs performance in closed-loop control.


SHORT BIO OF THE PRESENTER:
Dr. Karmali is an Assistant Professor at Harvard Medical School and the Co-director of the Jenks Vestibular Physiology Lab at Massachusetts Eye and Ear, Boston, MA, USA. He studies the vestibular system, multisensory integration, and closed-loop control using computational and experimental approaches.

DATE AND PLACE OF THE SEMINAR:
Thursday, July 1st, 2021 at 16:00 (CET)
g-Meet link:
https://meet.google.com/fsu-gbug-yvm