## Comparison of vestibular input statistics during natural activities and while piloting an aircraft

Running title: Vestibular inputs in natural activities and while piloting

**Authors**: Roques, A.<sup>1,2,3</sup>, James, Y<sup>3</sup>, Bargiotas, I.<sup>1</sup>, Keriven Serpollet D.<sup>1</sup>, Vayatis, N.<sup>1</sup>, Vidal, P.-P. <sup>4,1\*</sup>.

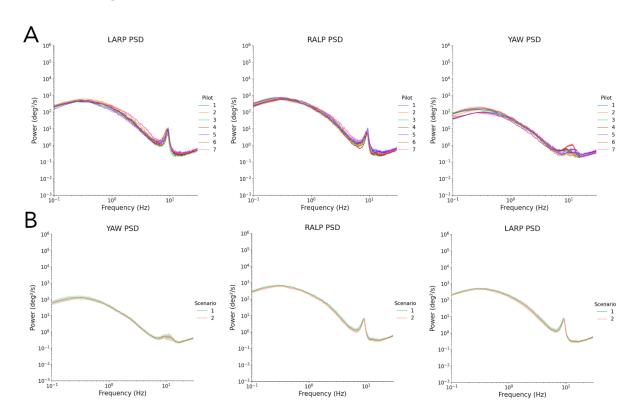
<sup>1</sup>Centre Borelli, CNRS, SSA, INSERM, Université Paris Saclay, ENS Paris Saclay, Université Paris Cité, 75006 Paris, France

<sup>2</sup>Laboratoire GBCM, EA7528, CNAM, Hesam Université, 75003 Paris, France

<sup>3</sup>Thales AVS, 95520 Osny, France

<sup>4</sup>Institute of Information and Control, Hangzhou Dianzi University, Hangzhou, China

## **Effect of experience & scenario**



Supplementary Figure 4: **A**: Power spectra of the head angular velocity in the LARP, RALP and YAW planes with corresponding 95% confidence interval (shaded areas) during the simulated flight for all pilots. **B**: Population-averaged power spectra of the head angular velocity in the LARP, RALP and YAW planes with corresponding 95% confidence interval (shaded areas) during the simulated flight in the two scenarios.

Despite different backgrounds and expertise, pilots showed similar power spectra (Supplementary Figure 4, A). Both scenarios elicited quasi-identical head movements in terms of frequency content (Supplementary Figure 4, B).