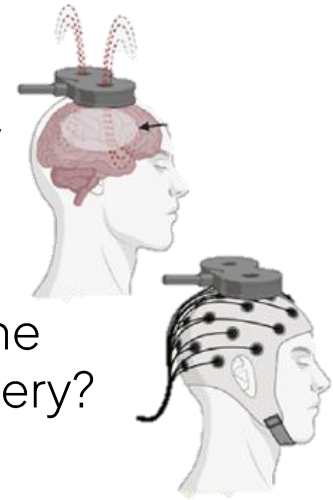




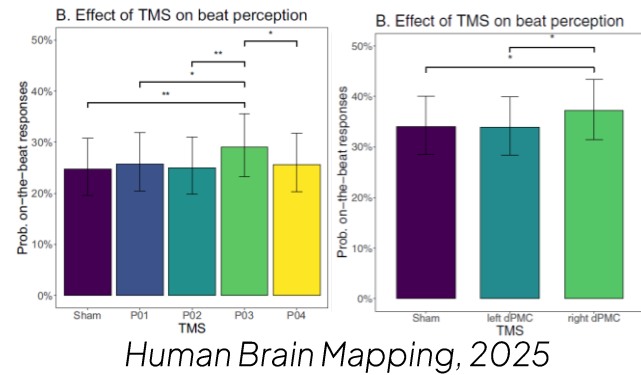
Humans have a remarkable ability to **extract a beat** from complex auditory stimuli, like music

Activation of motor planning regions during passive listening or imagination of rhythm. **LACK OF CAUSALITY**

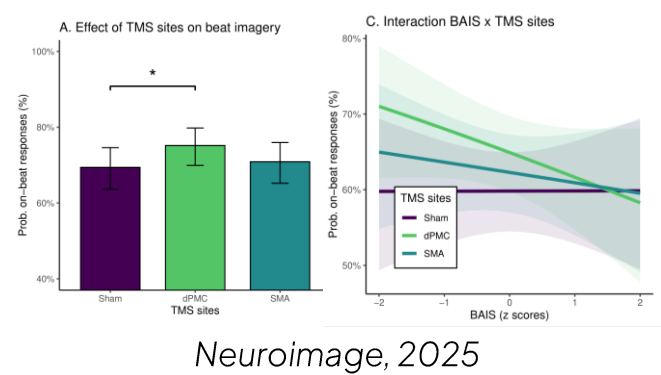
- Can we determine if the premotor activation is **causally necessary** for beat perception and imagery?
- How premotor cortex shapes **temporal prediction** to the auditory system during both beat perception and imagery?



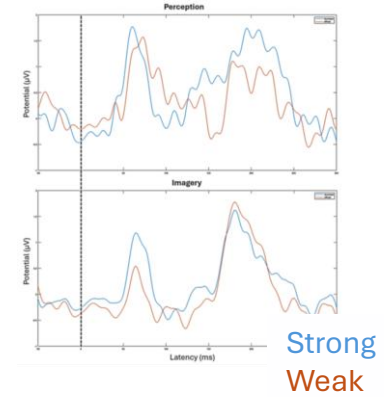
**STUDY 1**



**STUDY 2**



**STUDY 3**



**THE PREMOTOR ROOTS OF MUSICAL BEAT PERCEPTION AND IMAGERY: A NEUROPHYSIOLOGICAL INVESTIGATION**

Grant number: 241/2020. Host Institution: University of Pavia

With the support of

