

Abstract for CRBLM plenary lecture, May 18, 2021 (on Zoom)

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**Beat perception and synchronization: neural mechanisms, evolution, and links to language processing**

A core feature of human music cognition is the ability to perceive a beat in rhythmic sequences and synchronize movements to this beat in a predictive and tempo-flexible manner. In this presentation I will 1) outline recent ideas for the role that specific motor structures play in predicting the timing of beats, even in the absence of movement, 2) propose that beat perception and synchronization (BPS) has been a target of gene-culture coevolution in humans, and 3) discuss evidence for links between BPS and aspects of human language processing.