



**Helen Nuttal** Lancaster University

Sensorimotor processing during perception of degraded speech

Recent years have seen renewed interest in the idea that motor systems of the brain used for producing speech may also contribute to perceiving speech. Indeed, accumulating evidence suggests that speech production regions of the brain are active during speech perception. Activation of speech production regions appears further increased when perceiving speech under challenging listening conditions. However, the precise role of the speech motor system in speech perception remains unclear – in particular, the listening conditions which engage sensorimotor activation, and how sensorimotor activation relates to hearing acuity. My talk will elucidate the motor system's role in speech perception, and discuss how brain networks utilised for perceiving speech adapt based on the listener's needs and their auditory environment.

