# Impact of talker adaptation on speech processing and working memory Sung-Joo Lim<sup>1,2,3</sup>, Jessica A. A. Tin<sup>1</sup>, Barbara G. Shinn-Cunningham<sup>2,3</sup> & Tyler K. Perrachione<sup>1,3</sup>

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- acoustics of incoming speech signals are highly variable [1].
- rapid and accurate speech recognition [2, 3].
- power modulations [4, 5, 6]).
- process incoming speech?

# Participants

- Behavioral study (N=27) and EEG study (N=13)

## Stimuli

- talkers (4 female; 4 male)

## Task design

- Design (2 *talker* × 2 *stimulus rate*):



# Behavioral data

## Electroencephalography (EEG):

op.109–132.	[4] Jensen, O & Mazaheri, A (2011). Front Hum Neurosci, 4: 186.	
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	[6] Woestmann, M, Lim, S-J, & Obleser, J (2017). <i>Cereb Cortex, 27</i> (6):3307-3317.	
	[7] Oostenveld R, et al (2011). Comput Intell Neurosci.	
	[8] Shinn-Cunningham, BG (2008). <i>Trends Cogn Sci, 12</i> (5): 182–186.	



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