

Friday March 24th, 12pm (noon) ET

Presentation in Zoom, accessible via the C-STAR website:

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Assessment of speech perception and language comprehension in aphasia using temporal response function modeling

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In aphasia, deficits in auditory comprehension are prevalent. Recent computational advances allow for objective examination of neural correlates of auditory comprehension across levels of processing using a single, ecologically valid task wherein individuals listen to continuous speech while electroencephalography (EEG) responses are collected. This approach, multivariate temporal response function (TRF) modeling, involves fitting a linear function to map multivariate features of the continuous speech stimulus (e.g., spectrogram, lexical frequency) onto the EEG data. The resulting TRF is used to derive a predicted EEG, and prediction accuracy is assessed by computing the correlation between the TRF-predicted EEG and the observed EEG, providing a measure of the fidelity of neural processing of that feature. In this talk, I will discuss how we have been using TRF modeling in primary progressive and stroke-induced aphasia to assess speech perception and language comprehension.

The online lecture can be followed online from your computer, tablet or smartphone, in Zoom. The zoom link is accessible via the C-STAR website: <http://cstar.sc.edu/lecture-series/>

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