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Tufts Psychiatry Grand Rounds

Title: Global Context Insensitivity in Positive Thought Disorder: Quantifying Speech Disorganization Using a Large Language Model and Uncovering Mechanistic Insights with a Predictive Coding Model

### **Objectives**

1. Understand how Large Language Models (like GPT) can be used to quantify language disorganization in schizophrenia, linking psycholinguistic and neurocomputational approaches.
2. Gain insights into the use of multimodal neuroimaging methods (e.g., fMRI, EEG/MEG, intracranial recordings) to understand hierarchical predictive processing abnormalities in schizophrenia, particularly in language networks.
3. Discuss the relationship between disorganized language production and impairments in language comprehension in schizophrenia.
4. Recognize the key role of language dysfunction in contributing to both cognitive and social impairments in neuropsychiatric disorders.