

Tkach, Colleen

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From: Lauran Soto

DEPARTMENT OF NATURAL SCIENCES SEMINAR ANNOUNCEMENT:

"Language Models, Language Processing, and the Structure of Human Language"

Richard Futrell
University of California, Irvine

Friday, April 11th, 2025
Burns Lecture Hall (NS E007)
12:15-1:15 PM

Abstract: What can language models tell us about how human language works? I show that neural network language models, like the ones underlying ChatGPT, process language in a way that is similar to humans. This is because both language models and the human brain have a core task of predicting upcoming input based on previous input. The fact that humans process language this way imposes constraints on the structure of human language: it must be structured in a way that makes incremental prediction easy. I show that this constraint explains universal properties of languages across the world, and I show that it explains language models' ability to learn human-like and non-human-like languages.

Find additional DNS seminar information here: <https://www.kecksci.claremont.edu/seminars/>

Best,

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