

THURSDAY INTERDISCIPLINARY COLLOQUIUM

Thursday 18/06/2026

16:15-17:45

Webb 103

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How Deeply Human is Language? Chomsky, the Brain and the AI Fantasy

The appearance of Deep Learning Models has swept the computational world. In the language domain, Large Language Models (LLMs) are said to have passed the Turing Test with flying colors, leading to a loss of interest in symbolic approaches to language, of the type practiced by theoretical and experimental (neuro)linguists. This has been best articulated, perhaps, by Geoffrey Hinton, a 2024 Physics Nobel Laureate and 2018 Turing Award winner, who in his 2024 Romanes Lecture at Oxford noted that “Chomsky did amazing things, but his time is over.”

In my lecture (based on a book from which this talk inherited its title), I will try to convince you that Hinton’s dismissal of linguistic theory is neither justified conceptually, nor is it empirically supported. That is, LLMs may be reasonably well-engineered machines for specific language tasks, but they cannot be viewed as theories of the human linguistic capacity or the brain’s language machine. When tested against serious scientific benchmarks, they fail miserably. I will dwell on three aspects of this failure:

- Conceptually, LLMs as currently applied to language are unconstrained devices.
- Empirically, LLMs are both too strong and too weak.
- Methodologically, LLM-inspired tests that are aimed to detect brain activity patterns are inconsistent with results from linguistically-driven experiment in functional neuroimaging, and on neurological and neurosurgical patient populations.

Despite these deficiencies, and as I strongly believe in the great value of LLMs for an understanding of the brain’s language mechanisms, I will try to sketch a research program in which Deep Learning and symbolic approaches join forces to uncover the mysteries of the speaking brain.

Click [here](#) to see the colloquium program.