

Colloque - June 24th - 25th, 2021

The representation of language in brains and machines

Convenors: Stanislas Dehaene, Stéphane Mallat, Luigi Rizzi

Program

9h30 > 18h - Amphithéâtre Marguerite de Navarre

Open to the public, within space limits, subject to availability Ouvert au public, en demi-jauge, dans la limite des places disponibles

June 24th

9.30 Introduction, Stanislas Dehaene, Stéphane Mallat, Luigi Rizzi, Collège de France

Semantics And Pragmatics: New Challenges For Machines? (1)

10.00 Philippe SCHLENKER, *ENS, Paris* Grammatical inferences without words

10.40 Emmanuel CHEMLA, *ENS*, *Paris* A linguistic learning bias found in humans, animals, and artificial learners

11.20 Break

The Acquisition Of Language

11.40 Anne CHRISTOPHE, ENS, Paris Bootstrapping the syntactic bootstrapper

12.20 Naama FRIEDMANN*, *Tel Aviv University* Developmental syntactic disorders and what they say about the critical period

13.00 Break

Natural Languages And Machine Learning Approaches

15.00 Kyunghyun CHO*, *New York University* Few-shot learning is still difficult with large-scale language models

15.40 Tomas MIKOLOV*, *FAIR, Paris* Neural language models: the successes, and the challenges

16.20 Break

16.40 Charles YANG, *University of Pennsylvania* Why children and machines learn differently

17.20 Roger LEVI*, *MIT* Grammatical generalization and language processing in humans and machines

18.00 General discussion

June 25th

Cognitive Challenges For Computational Approaches

09.30 Emmanuel DUPOUX*, *ENS & FAIR, Paris* Simulating the emergence of linguistic categories in infants

10.10 Marco BARONI*, *ICREA*, *Barcelona*; *FAIR*, *Paris* On the proper role of linguistically-oriented deep net analysis in linguistic theorizing

10.50 Break

Advances In Syntax And Parsing

11.10 Andrea MORO & Cristiano CHESI*, Scuola Universitaria IUSS, Pavia The limits of competence and processing: the case of copular sentences

11.50 Paola MERLO*, University of Geneva Beyond the Benchmarks: linguistically-informed notions of locality and similarity in distributed spaces

12.30 Break

Semantics And Pragmatics: New Challenges For Machines? (2)

14.00 Gennaro CHIERCHIA*, *Harvard University* Quantifiers in natural language: the interface between syntax and logic

14.40 Benjamin SPECTOR, *ENS, Paris* Logic, grammar and distribution: the case of polarity items

15.20 Break

Syntax And Parsing By Brains And Machines

15.40 Christophe PALLIER, *CNRS, Paris* Probing syntax and semantics in the brain

16.20 William MATCHIN, University of South Carolina The cortical organization of syntax: a minimalist perspective

17.00 Break

17.20 Stanislas DEHAENE, *Collège de France* Why humans still trump machines: the language of thought hypothesis

18.00 General Discussion

* These talks will happen via zoom Ces interventions auront lieu via zoom



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Année académique 2020/2021