

Научный семинар Школы лингвистики НИУ ВШЭ

с участием лингвистической лаборатории по корпусным
технологиям и лаборатории языков Кавказа

Evelina Fedorenko

MIT

The language system in the human brain

The goal of my research program is to understand the representations and computations that enable us to share complex thoughts with one another via language, and their neural implementation. A decade ago, I developed a robust new approach to the study of language in the brain based on identifying language-responsive cortex functionally in individual participants. In this talk, I will highlight a few discoveries from the last decade. First, I will show that the language brain regions are highly selective for language over diverse non-linguistic processes—from math and music, to executive processes, to non-verbal semantic cognition, and even processing computer code—while also showing a deep and intriguing link with a system that supports social cognition. Second, I will show that, contra many leading accounts, the language regions support both understanding of word meanings and sentence-structure building, with no part of the language network being selective for syntactic processing. Finally, I will present recent evidence of predictive coding in the language network during naturalistic comprehension and show that state-of-the-art artificial neural network language models—optimized for predictive processing—accurately capture neural responses during language comprehension. The latter line of work is a critical first step to developing mechanistic accounts of language comprehension.

В зуме: <https://us02web.zoom.us/j/4532123186>

16 февраля (среда) в 18:00

Сайт семинара:

ling.hse.ru/SciSeminar

