



universität
wien

Faculty of Psychology

Colloquium lecture of Prof. Jutta Mueller

Introducing the Babelfish Lab:
From associative learning to higher order cognition

In this talk I will give an overview of the research program of the new Babelfish-lab at the University of Vienna. Our research agenda has the goal to shed light on the roots of language learning and processing in domain-general cognitive functions as well as on the benefits that language bestows on other cognitive functions. In the first part of the talk I will present a set of studies on complex sequence learning showing how infants and non-human primates are able to learn non-adjacent dependencies, which form a core building block of human grammar. I will suggest that the basic underlying learning mechanisms may be shared across primate species and can be explained by rather simple neurocomputational mechanisms as evidenced by simulations in a spiking neural network. In the second part of the talk I will show how the availability of a full-fledged language system, which is unique to humans, may contribute to and occasionally transform processes in other cognitive domains, such as memory or cognitive control. While facilitatory effects of language on cognition are known in many domains a unifying framework explaining the underlying mechanisms and their development is still amiss.

Jutta L. Mueller, Univ.-Prof. Dipl.-Psych. Dr. rer. nat.
University of Vienna, Psycholinguistics

The colloquium lectures of this semester take place online!

Lecture on Thursday December 17th 2020, 4 pm

Join Zoom Meeting

<https://zoom.us/j/92483043383?pwd=czdKTWnUnJGWFNRYRVNSWmMxL3J0UT09>

Meeting ID: 924 8304 3383

Passcode: vCUYp0