

**Invitation to a guest lecture
at the joint colloquium of the Institute of Biology and Environmental Sciences and the
Department of Neuroscience**

Module bio890: Current topics in biology

Dr. Jan Clemens

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From song to behavior in *Drosophila*

How do acoustic cues inform social interactions? My lab seeks to answer this question on multiple levels: At the behavioral level, by identifying the operations by which acoustic communication signals are produced, recognized, and combined with other social cues like pheromones. At the neuronal level, by identifying how these operations are implemented in the circuits of the brain. And at the level of evolution, by identifying the principles by which these circuits evolve to detect the signals and cues that are specific to each species. In this talk, I will give an overview of our research. To illustrate our approach, I will focus on an unpublished study in which we combined computational modelling with genetic tools to identify the behavioral rules and circuit motifs that support flexible and adaptive communication.

19.07.2022, 4:15 pm, W04 1-162

Host: Prof. Dr. Jutta Kretzberg (Computational Neuroscience), DfN

Members of all institutes are cordially invited to join the lecture.