

232nd WPI-IIIS Seminar

Ecological flexibility in avian sleep

Sleep plays an important role in the lives of animals ranging from jellyfish to humans. To maintain adaptive waking cognitive performance, it is commonly thought that animals need to fulfill a fixed daily quota of sleep, an inherently dangerous state of reduced environmental awareness. However, studies of birds in the lab and wild indicate that the amount, type, and structure of sleep can be highly flexible in response to changing ecological demands. In this talk, I will provide an overview of our research on ecological flexibility in avian sleep, including responses to predation risk, adaptive sleeplessness in male polygamous sandpipers, sleep in flying frigatebirds, microsleeps in nesting penguins, and sleep-swimming in geese. By demonstrating that sleep is far more flexible than previously thought, birds pose a potentially informative challenge to current theories for the function of sleep.



Dr. Niels C. Rattenborg

Max Planck Institute for Biological Intelligence

Date: **Tuesday, July 29, 2025**

Time: **11:30 – 12:30**

Venue: **1F Auditorium, IIIS Building**

*** On-site participation only**



IIIS

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