



Friedrich-Alexander-Universität
Research Center for
Mathematics of Data | MoD

FAU MoD Lecture Series



**Do you think you understand sex and death?
Why predictions about biological processes
require more than just intuition**

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WWW.MOD.FAU.EU

#FAUMoDLecture

WHEN

Tuesday **January 28, 2025**
13:00H (Berlin time)

WHERE

On-site / Online

Friedrich-Alexander-Universität
Erlangen-Nürnberg

Room H17

Department Maschinenbau
Immerwahrstraße 1 (zuvor
Haberstr. 1), 91058
Erlangen. Bavaria, Germany

FAU Live-streaming:

www.fau.tv/fau-mod-livestream-2025

I sometimes state, in a slightly tongue in cheek manner, that biologists are the only people who do not understand why sex exists. This is because they appreciate that asexual reproduction is also often possible, and can be very efficient. I will illuminate some of the complications that follow using *Daphnia* (waterfleas) as an example, and then I will turn to a very different topic: evolution of senescence. If natural selection favours, all else being equal, longer lifespans, it is difficult to explain why there is so much variation in lifespans in nature.

This talk, as a whole, illuminates the theoretical side of evolutionary biology (why biologists, too, need a dose of equations in their training).