



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

FAU MoD Lecture Series



A long life: How desirable is it, evolutionarily speaking?

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#FAUMoDLecture

WHEN

Monday **February 02, 2026**
11:00H (Berlin time)

WHERE

On-site / Online

Friedrich-Alexander-Universität
Erlangen-Nürnberg (FAU).
Room **H13 Johann-Radon-Hörsaal**
Felix-Klein building
Cauerstraße 11, 91058
Erlangen. Bavaria, Germany

Live-streaming:

<https://www.fau.tv/clip/id/59621>

What does a theoretical biologist do? We try to understand why evolution produces so much diversity. Naively, one might think that if natural selection continually seeks out the 'best' solutions, by now one best-performing organism should have emerged. Instead, there is vast diversity, even for characteristics such as lifespan that appear easily arrangeable an axis from worse to better. For every superbly long-lived shark species, there are very many other species of fish that die at a much younger age. I will present two examples of our work on senescence evolution: first, an exploration of the so-called Williams hypothesis, which emphasizes the role of extrinsic (unavoidable) mortality in shaping how 'robustly' bodies will be built, and second, a comparative analysis on birds and mammals, showing that birds appear to senesce less than mammals do.