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## **Survival of bacteria in starvation**

Bacteria spend most of their life-time in nutrient limitation. In these conditions, even the basic concepts of survival and death are unclear, since most of our studies have been focused on bacterial growth. In this talk, I will present our recent studies of *E. coli* in carbon starvation and show that the population's characteristic exponential decay is caused by cell's energy need and biomass recycling. Enforcing the cell envelope decreases the energy need and prolongs survival, but comes at the cost of reducing the growth rate. Understanding the mechanistic basis of this trade-off will help us understanding the evolutionary pressures of bacterial life and death.

Wednesday, June 26, 2019, 17:00  
Institute for Biological Physics, Zülpicher Str. 77a  
Seminar Room 0.03, Ground Floor

Hosted by Berenike Maier