

Bartek Waclaw

University of Edinburgh and

Dioscuri Centre for

Physics and Chemistry of Bacteria

The physics of growth and evolution of bacterial biofilms

Microbes in biofilms interact with each other and the environment in many ways, including mechanical repulsion, adhesion, and friction. In the last 10 years, these physics-like interactions have been shown to be as important for biofilm growth and evolution as biochemical interactions. In this talk, I will discuss how mechanical interactions affect the establishment probability of new genetic variants, and how the physics of a growing biofilm can be used against it to reduce the chance that an undesired variant, e.g., an antibiotic-resistant mutant, spreads in the biofilm.

Wednesday, 14 May 2025, 17:00

Institute for Biological Physics, Zülpicher Str. 77a

Seminar Room S0.02

Hosted by Joachim Krug