

Eugene Wigner Colloquium

joint event of GRK 1558 and SFB 910



Prof. Berenike Maier

Universität zu Köln

“Coordination of bacterial motors”

Bacteria can control their physico-chemical interactions with the environment by varying their surface appendages. Having small genomes, they often use a single surface structure for different functions. One such multifunctional extracellular polymer is the type IV pilus. The pilus acts both as a molecular motor driving motility and as an adhesin governing interactions between bacteria and their host. I will show how bacteria control the motor properties of the pilus in response to environmental changes and how they coordinate multiple motors. Furthermore, I will discuss the dynamics of bacterial clusters in which bacteria switch their surface properties through high-frequency mutations of type IV pili.

Thursday, 20.11.14 · 16:15h · EW 202

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