



FriSBI

# Modelling how cell wall targeting antibiotics work

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Antibiotics are central in modern medicine, and the threat of antimicrobial resistance makes it important that we use them as effectively as possible. Yet there are surprising gaps in our understanding of how antibiotics work in growing bacterial cells. Antibiotics that target the bacterial cell wall account for the majority of clinical usage. Building on the results of simple growth experiments on different media and using different cell wall targeting antibiotics, we have developed a mathematical model for the interplay between bacterial growth and the action of cell wall targeting antibiotics. Our model suggests that the balance between bacterial surface area and volume growth may play a crucial role.

**Tuesday, November 27, 2018 10:00am - 11:00am**  
IST Austria Campus Mondi Seminar Room 3, Central Building



This invitation is valid as a ticket for the IST Shuttle from and to Heiligenstadt Station. Please find a schedule of the IST Shuttle on our webpage: <https://ist.ac.at/en/campus/how-to-get-here/> The IST Shuttle bus is marked IST Shuttle (#142) and has the Institute Logo printed on the side.