

## Thesis defense

## Thesis Defense Karin Mitosch: Timing, variability and cross-protection in bacteria

## Karin Mitosch (Bollenbach Group)

IST Austria

Host:

Abstract:

Antibiotics are small molecules used to control bacterial infections in humans and animals. However, antibiotics also have a plethora of effects on bacteria: they can change bacterial growth, cell shape, metabolism, and gene expression. Studying such effects and their interactions in high detail can hint at reasons for the failure of antibiotic therapy, and can further provide valuable insights into bacterial physiology. In this talk, Karin will explain how antibiotics-induced growth rate changes interplay with gene expression, what cell-to-cell variability in response to antibiotics can tell about underlying mechanisms, and how the pre-exposure to antibiotics can protect bacteria from otherwise lethal environmental stressors.

Short bio:

Karin studied Molecular Biology in Ulm, Amsterdam, and Zurich. Before starting her PhD, she spent a research year in Japan. She joined IST in May 2011 to work towards her PhD in the group of Tobias Bollenbach. Recently, she started as a Postdoc fellow at the EMBL Heidelberg with Nassos Typas.

## Monday, July 24, 2017 11:00am - 12:00pm

Mondi Seminar Room 2, Central Building



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

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