



4th year colloquium

# What we can learn from bottom-up biology

**Martin Loose**

IST Austria

Host: Leonid Sazanov

Even if the molecules required for cellular processes have been identified, how they act together to accomplish a specific task is often not well understood. In our lab, instead of looking at complex phenomena in intact cells, we aim to rebuild cellular functions from purified components. This bottom-up synthetic biology approach allows us to quantitatively characterize molecular events underlying a particular cellular processes. In my seminar, I will present our results from two research directions: First, the mechanism of bacterial cell division, and second, the emergent properties of Small GTPase networks. I will show how our results not only help us to understand the molecular mechanisms, but also to identify the general principles of protein self-organization, which eventually give rise to the living cell.

**Monday, January 21, 2019 04:00pm - 05:00pm**

Raiffeisen Lecture Hall



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.