



## Colloquium

# Institute Colloquium: Populations in Lineage Perspective

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Host:

Bacterial populations are increasingly understood to be highly heterogeneous, due to effects of noisy gene expression, stochastic switches, and other mechanisms that maintain phenotypic diversity. Their population dynamics are thus strongly affected by selective forces acting on different subpopulations. In addition, the physiological responses of individual cells to fluctuating conditions affect the phenotypic structure of the population. This talk presents a theoretical framework for understanding these dynamics using individuals' phenotypic histories observed over their ancestral lineage. The lineage perspective enables the action of selection to be decoupled from that of individuals' responses.

Experiments on continuously dividing bacterial populations growing in microfluidics devices are being used to test aspects of this approach.

**Monday, January 9, 2012 04:30pm - 05:30pm**

Raiffeisen Lecture Hall, 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.