



## Colloquium

# Control theory in evolution

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Host: Fyodor Kondrashov

With a few notable exceptions there is little cross-talk between evolutionary theory and control theory of dynamic systems. Yet, both fields are intensely focused on essentially an identical set of problems – on reconciling stability and change, continuity and discreteness, innovation and complexity, and inherency and contingency. Both fields aim to resolve these problems by predicting the distribution and kinds of “controls” that either change or regulate complex systems. As a result, we now have a set of parallel solutions to essentially the same problems but from largely non-overlapping starting points, backgrounds, and motivations. I will review these solutions, focusing on their empirical manifestations and the insights they provide into some of the most long-standing issues in evolutionary biology, including the most enigmatic of them all – the relationship between form and function in development and inheritance.

**Monday, December 16, 2019 04:00pm - 05:00pm**

Raiffeisen Lecture Hall, Central Building



This invitation is valid as a ticket for the ISTA Shuttle from and to Heiligenstadt Station.

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