

## Theory Lunch Seminar

# *Theoretical biological physics: from systems to principles*

Biological physics, both experimental and theoretical, addresses systems spanning multiple length (and time and energy) scales. Each of these systems poses formidable challenges to modelling efforts, because the staggering complexity of biological systems makes it difficult identifying the relevant components and their interactions. This notwithstanding, constant advancements have been made, and, as more and more special cases are progressively better characterized, general rules start emerging.

In this talk I will outline, through two examples, what I consider one of the most important overarching principles in biology: biological systems are open dissipative systems, and it is now becoming possible to move from general, true but vague statements to quantitative and physically grounded predictions that can be tested experimentally.



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**Tuesday December 12<sup>th</sup> 2017 at 12:30 pm**

**Auditoire II, room N°234, BSP (Cubotron), EPFL**