

LECTURE SERIES

**Tuesday,
25th June
2019**

12:15 - 13:15

Campus Biotech
Room H8.01.D
9, chemin des Mines
Geneva

Action-selection under threat: algorithms and neural circuits for survival

Prof. Dominik R. Bach

(University of Zurich)

Appropriate behaviour under threat is key to survival. In my talk, I will ask what are the computational algorithms and neural controllers by which biological agents decide on what to do, and how. Non-human animal data tentatively suggest a specific architecture that relies on tailored algorithms for specific threat scenarios. To investigate this in humans, I will discuss the translation of approach-avoidance conflict (AAC), a classical rodent anxiety model, to human computer games involving virtual threat. I will analyze possible cognitive-computational algorithms for behavioral control and learning in these tasks, and their neural implementation.

Swiss Doctoral School in Affective Sciences
swissuniversities