

Animals have to move in order to accomplish fundamental tasks such as foraging, migration and mating. They navigate the environment by collecting information through their senses, integrating the different inputs and generating a motor response that finally results in efficient search strategies.

How do different organisms solve similar problems? Are there unifying principles? How are neural circuits organized so as to direct appropriate behavior? Can animal behavior provide useful inspiration for robotics applications? Can results from decision-making theory improve our understanding of animal behavior? How can physical and mathematical modeling contribute to advance our knowledge?

This workshop aims at gathering physicists, biologists, neuroscientists, and computer scientists to offer their diverse perspectives and explore new directions for research and opportunities for collaborations in this rapidly developing field.

## How to apply:

Online application: http://indico.ictp.it/event/8968/

Female scientists are encouraged to apply.

#### **Grants:**

A limited number of grants are available to support the attendance of selected participants, with priority given to participants from developing countries. There is no registration fee for this workshop.

### **Directors:**

M. VERGASSOLA, UCSD A. CELANI, ICTP

### **Speakers:**

Mahesh M. BANDI, OIST
Vikas BHANDAWAT, Duke U.
Ring CARDÉ, UC Riverside
Jérôme CASAS, U. Tours
Anna GAGLIARDO, U. Pisa
Daniel GOLDMAN, Georgia Tech
Nick GRAVISH, UC San Diego
David L. HU, Georgia Tech
Katherine NAGEL, NYU
Ran NATHAN, The Hebrew U. of Jerusalem
Sharad RAMANATHAN, Harvard U.
Hervé ROUAULT, H. Hughes Medical Institute
Aravinthan D.T. SAMUEL, Harvard U.
Greg J. STEPHENS, VU Amsterdam
Yossi YOVEL, Tel-Aviv University

# Deadline extended to: 31 May 2019







