Workshop on Operations Research of Biological Systems



9 - 14 July 2018 Trieste, Italy

Further information: http://indico.ictp.it/event/8322/ smr3223@ictp.it

This workshop explores the deep connections that exist between operations research and the process of self-reproduction, viewed as a self-reproducing factory. The workshop seeks to deepen our understanding of how cells dynamically allocate their resources, and what the inherent trade-offs that exist are. The workshop will further explore the connections between different advanced models from classical and modern queuing theory, to biology of enzymes, and the control of traffic and its connection to intercellular trafficking of goods on actin-networks.

The long-term goal of the workshop is to boost research and collaboration in this field, by strengthening the connection between current problems in system biology, molecular cell biology and bacterial physiology, and formal operations research approaches to issues of throughput, efficiency, resource allocation, reliability and redundancy.

How to apply:

Online application: http://indico.ictp.it/event/8322/

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.

Organizers:

Suckjoon Jun, UC San Diego, USA Rami Pugatch, ICTP

Local Organizer:

Matteo Marsili, ICTP

List of Speakers:

Eitan Bachmat, BGU John Bechhoefer, SFU (Canada) Amarjit Budhiraja, NCU Naama Brenner, Technion **Debashish Chowdhury, IIT Kanpur** Marco Cosentino Lagomarsino, UPMC Paris **Ken Dill, Stony Brook University** Erol Gelenbe, Imperial College, London Nigel Goldenfeld, University of Illinois Mor Harchol-Balter, CMU Sanjay Jain, Delhi University Tetsuya Kobayashi, University of Tokyo **Edo Kussell, NYU** Sergei Maslov, Brookhaven NL Raj Rao Nadakuditi, University of Michigan Luca Peliti, SMRI, Italy Rami Pugatch, ICTP Shlomi Reuveni, University of Tel Aviv Hanna Salman, University of Pittsburgh Kim Sneppen, University of Copenhagen Mukund Thattai, NCBS, Bangalore Li Zhiyuan, Princeton

Deadline:

15 April 2018





