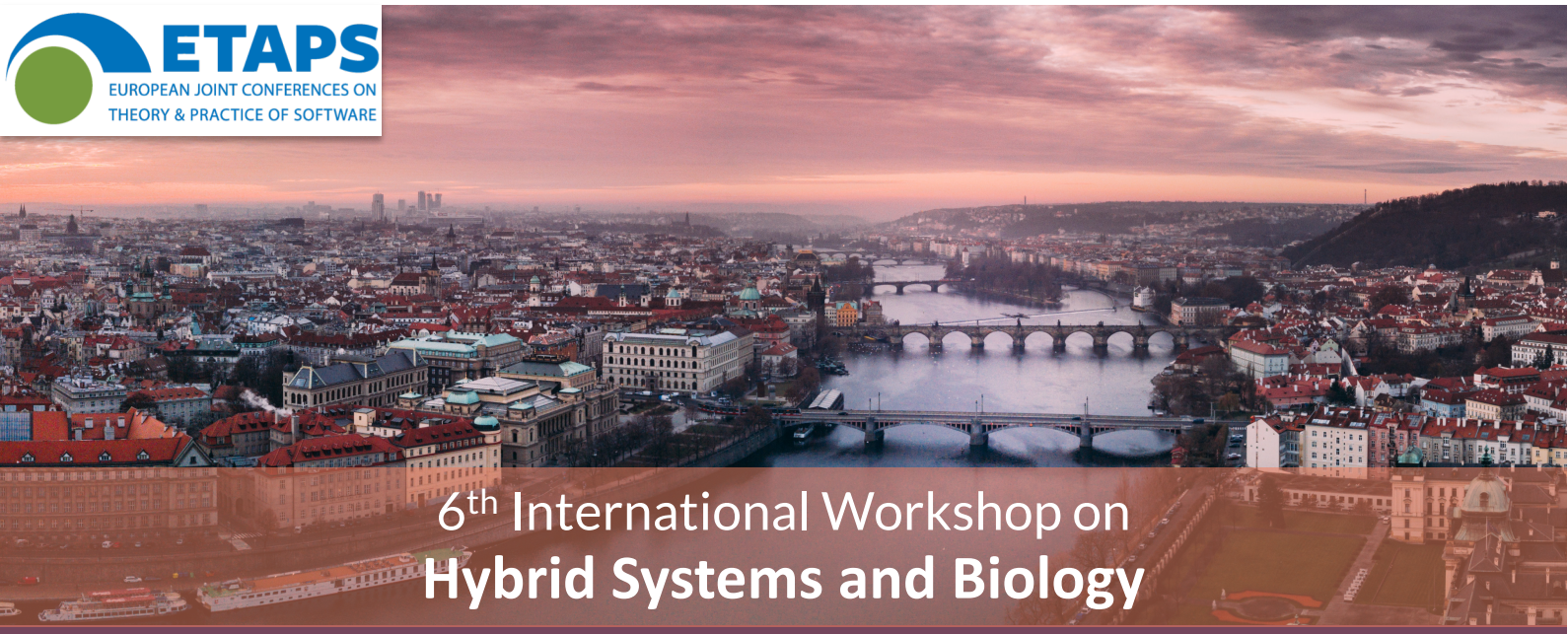
ETAPS
EUROPEAN JOINT CONFERENCES ON THEORY & PRACTICE OF SOFTWARE



6th International Workshop on Hybrid Systems and Biology

April 6-7 2019, Prague (CZ), co-located with **ETAPS 2019** http://hsb2019.fit.vutbr.cz

About

HSB is a single-track workshop centring on dynamical models in biology, with an emphasis on both hybrid systems (in the classical sense, i.e., mixed continuous-discrete-stochastic systems) and hybrid approaches that combine modelling, analysis, algorithmic and experimental techniques from different areas.

Topics of interest include, but are not limited to:

- Modelling and analysis of metabolic, signalling, and genetic regulatory networks in living cells.
- Stochastic and hybrid models in biology.
- Models of tissues and organs; physiological models.
- Learning, synthesis, and inference of biosystems.
- Hierarchical systems for multi-scale, multi-domain analysis.
- Abstraction, approximation, discretisation, and model reduction techniques.
- Synthetic biology, cyber-biological / bio-in-the-loop systems, biomedical systems and devices, and bio-robotics.
- Game-theoretical frameworks and population models in biology.
- Quantitative and formal analysis techniques (e.g. reachability, model checking, abstract interpretation, bifurcation theory).
- Modelling languages and logics for biosystems.

PC co-chairs

- Milan Ceska, Brno University of Technology
- Nicola Paoletti, Royal Holloway, University of London

Invited speakers

- Marta Kwiatkowska, University of Oxford
- Michela Chiappalone, IIT Genova
- Igor Schreiber, University of Chemistry and Technology Prague

HSB will also have a special session dedicated to the memory of Oded Maler, with invited talks by Thao Dang (CNRS/VERIMAG, France), Eugene Asarin (IRIF, France), and Alexandre Donzé (Decyphir Inc. and University of California at Berkeley, USA)

Format

Papers should be submitted to one of the following categories:

- Regular papers (15 pages LNCS style)
- Tool papers (6 pages LNCS style).

Post-proceedings will appear as a volume in Springer LNCS/LNBI.

Important dates

- Paper submission: 4 Jan 2019
- Poster abstract submission: 4 Jan 2019
- Author notification: 24 Feb 2019
- Workshop: 6-7 Apr 2019
- Final post-proceedings version: 5 May 2019