CMSB 2018: 16th International Conference on Computational Methods in Systems Biology

2nd Call for Contributions   https://cmsb2018.fi.muni.cz/

The 16th conference on Computational Methods in Systems Biology (CMSB 2018) will take place on the **12th to 14th September 2018** in Brno, Czech Republic. Its aim is to bring together researchers from across biological, mathematical, computational, and physical sciences who are interested in the study, modelling, simulation, advanced analysis, and design of biological systems. CMSB 2018 will be hosted at Faculty of Informatics, Masaryk University.

INVITED SPEAKERS

Andrew Turberfield, University of Oxford, UK

Mustafa Khammash, ETH Zurich, CH

Chris J. Myers, University of Utah, US

Andrew Phillips, Microsoft Research, UK

IMPORTANT DATES

All deadlines are AOE (Anywhere on Earth).

Paper abstract pre-submission:	**20.4.2018**
Paper submission:	**27.4.2018**
Poster abstract submission (category I):	27.4.2018
Author notification:	8.6.2018
Final version:	15.6.2018
Presentation and poster category II abstract submission:	22.6.2018

TOPICS OF INTEREST

CMSB 2018 solicits original research articles, tool papers, posters, and presentations on the **modelling** and **analysis of biological systems** and networks as well as the **analysis of biological data**. The conference brings together computer scientists, biologists, mathematicians, engineers, and physicists interested in a system-level understanding of biological processes. It covers the broad field of **computational methods** and **tools** in **systems** and **synthetic biology** and their **applications**.

Topics of interest include, but are not limited to:

- formalisms for modelling biological processes
- models, methods, tools and their biological applications
- frameworks for model verification, validation, analysis, and simulation of biological systems
- high-performance methods for computational systems biology
- parameter and model inference from experimental data
- automated parameter and model synthesis
- model integration and biological databases
- multi-scale modelling and analysis methods
- design, analysis, and verification methods for synthetic biology
- methods for biomolecular computing and engineered molecular devices

In general, the conference is open to new theoretical results with potential applications to systems and synthetic biology, as well as novel applications and case studies of existing methods, tools, or frameworks.

The CMSB 2018 proceedings will be published in the Springer LNCS series and indexed by ISI Web of Science, Scopus, ACM Digital Library, DBLP, and Google Scholar.

A selection of best papers will be invited to be extended and submitted to a special section of IEEE/ACM Transactions on Computational Biology and Bioinformatics.

Contributions should be submitted to one of the following categories:

A) Regular papers
B) Tool papers
C) Posters
D) Presentations

A) CALL FOR REGULAR PAPERS

Regular papers should describe original work that has not been previously published and is not under review for publication elsewhere. The papers should **not exceed 15 pages** in Springer LNCS style, **not counting references** and well-marked appendices.

B) CALL FOR TOOL PAPERS

Tool papers should present new tools or public websites, new tool components or novel extensions to existing tools or websites supporting the modelling, specification and analysis of biological systems. Each submission should be original and not previously published in a tool paper form. The papers should **not exceed 6 pages** in Springer LNCS style **including references**, but not counting well-marked appendices. The papers must include information on methods, tool availability, and selected experimental results. Tool papers are required to be submitted together with an artefact by the submission deadline (for details see the guidelines – http://cmsb2018.fi.muni.cz/artefact-submission/).

Artefacts will be evaluated by the tool evaluation committee in parallel with the review procedure. The program committee will have access to the tool artefact evaluation while making their decision.

In special cases, where an artefact cannot be submitted, the authors are suggested to contact the program chairs to find alternate modes of evaluation. Apart of the presentation, accepted tool papers will be encouraged to include a showcase/running demo during the tool demo session.

C) CALL FOR POSTERS

CMSB 2018 solicits poster abstracts presenting **I) original unpublished work** and **II) recent out-standing results** already accepted to a recognised journal or a high-quality conference during the last year. The abstracts should be submitted in Springer LNCS style and **should not exceed 2 pages including references**. Based on the abstracts the program committee will select posters to be presented at the CMSB 2018 poster session including flash presentations.

Excellent abstracts in the category (I) will be selected for publication in the LNCS proceedings.

D) CALL FOR PRESENTATIONS

CMSB 2018 offers the track of oral presentations without full paper or poster submission. We welcome submissions of work that has been already published in a journal, or that is currently under review or will soon be submitted. The abstracts summarizing the results and their relevance should **not exceed 2 pages including references**. The document format must be single spaced and written in an 11 point type font.

SUBMISSION INFORMATION

All papers and poster/presentation abstracts have to be written in English and submitted electronically using the EasyChair online submission system (https://easychair.org/conferences/?conf=cmsb2018) in the form of a PDF file. Each submission will be reviewed by at least three reviewers. The reviewers are not required to read the appendices and thus the submissions must be intelligible without them.

All accepted contributions must be presented at the conference by one of the authors.

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