



## Call for papers

The 11th International Workshop on Coalgebraic Methods in Computer Science  
31 March - 1 April 2012, Tallinn, Estonia  
(co-located with ETAPS 2012)  
[www.coalg.org/cmcs12](http://www.coalg.org/cmcs12)

\*\*\* **Proceedings to be published in Springer LNCS** \*\*\*

**Aims and scope:** In more than a decade of research, it has been established that a wide variety of state-based dynamical systems, like transition systems, automata (including weighted and probabilistic variants), Markov chains, and game-based systems, can be treated uniformly as coalgebras. Coalgebra has developed into a field of its own interest presenting a deep mathematical foundation, a growing field of applications, and interactions with various other fields such as reactive and interactive system theory, object-oriented and concurrent programming, formal system specification, modal and description logics, artificial intelligence, dynamical systems, control systems, category theory, algebra, analysis, etc. The aim of the CMCS workshop series is to bring together researchers with a common interest in the theory of coalgebras, their logics, and their applications.

The topics of the workshop include, but are not limited to:

- ^ the theory of coalgebras (including set theoretic and categorical approaches);
- ^ coalgebras as computational and semantical models (for programming languages, dynamical systems, etc.);
- ^ coalgebras in (functional, object-oriented, concurrent) programming;
- ^ coalgebras and data types;
- ^ (coinductive) definition and proof principles for coalgebras (with bisimulations or invariants);
- ^ coalgebras and algebras;
- ^ coalgebraic specification and verification;
- ^ coalgebras and (modal) logic;
- ^ coalgebra and control theory (notably of discrete event and hybrid systems).

**Keynote Speaker:** Samson Abramsky, Oxford University, UK

**Invited Speakers :** Marcello Bonsangue, Leiden University, The Netherlands  
Pawel Sobocinski, University of Southampton, UK

**Submissions:** Submission is electronic via the easychair system at  
<http://www.easychair.org/conferences/?conf=cmcs2012>  
following the submission guidelines below. We solicit two types of contributions:

(a) Regular papers to be evaluated by the PC for publication in the proceedings: They must have a length no greater than 20 pages, formatted in LNCS style (<http://www.springer.de/comp/lncs/authors.html>). They must contain original contributions, be clearly written, and include appropriate reference to and comparison with related work.

(b) Short contributions: These will not be published in the proceedings but will be bundled in a technical report. They should be no more than two pages in LNCS format and may describe work in progress, summarise work submitted to a conference or workshop elsewhere, or in some other way appeal to the CMCS audience.

### Proceedings Publication

The proceedings of CMCS 2012 will be published in Springer Lecture Notes in Computer Science. The final proceedings will be published post-conference and feature revised versions of the accepted regular papers. Preliminary proceedings will be made available at the conference in electronic form.

Depending on the number and quality of submissions, we will consider publishing extended and revised papers as a journal special issue, subject to the usual reviewing procedure. Previous special issues of CMCS have appeared in high-ranking journals including Information and Computation and Theoretical Computer Science.

## **Important dates**

**4 January 2012:** strict submission deadline regular papers  
**3 February 2012:** notification regular papers  
**7 February 2012:** final version  
**27 February 2012:** strict submission deadline short contributions  
**6 March 2010:** notification short contributions  
**31 March - 1 April 2012:** the workshop

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