

ACA 2012

18th International Conference on Applications of Computer Algebra

June 25 – 28, 2012, Sofia, Bulgaria

<http://www.math.bas.bg/ACA2012>

A conference devoted to promoting the growing applications
of computer algebra in all areas, including science, engineering and education

Invited Talks

Trends in Computer Algebraic Analysis
Viktor Levandovskyy
RWTH Aachen University

**Benefits and Barriers of Symbolic Computations
on Clouds and Grids**
Dana Petcu
West University of Timișoara

**Symbolic Computation in the Design
of Coding Systems**
Clifton Williamson
Proton Digital Systems

**Roles and Expectations of Symbolic Computation
in Automotive Development**
Tetsu Yamaguchi
Maplesoft

Special Sessions

Nonstandard Applications of Computer Algebra

Computer Algebra in Education

Interaction Between Computer Algebra
and Interval Computations

Computer Algebra in Coding Theory
and Cryptography

Computer Algebra for Dynamical Systems
and Celestial Mechanics

Computer Algebra in Group Theory
and Representation Theory

Parallel Computer Algebra Applications

Algebraic and Algorithmic Aspects of Differential
and Integral Operators Session

Computational Aspects of Constrained Dynamical
Systems and Field Theories

Compact Computer Algebra

Program Committee

Alkiviadis Akritas, Michel Beaudin, Bruno Buchberger, Jacques Calmet, Victor Edneral,
Victor Ganzha, José Luis Galán García, Vladimir Gerdt, Mark Giesbrecht, Hoon Hong, David Jeffrey,
Erich Kaltofen, Ilias Kotsireas, Bernhard Kutzler, Robert H. Lewis, Richard Liska, Winfried Neun,
Matu-Tarow Noda, Gilles Picard, Kathleen Pineau, Bill Pletsch, Eugenio Roanes-Lozano (ACA WG Chair),
Tateaki Sasaki, Yosuke Sato, Tony Shaska, Margarita Spiridonova,
Stanly Steinberg (founder of the ACA conference series), Agnes Szanto, Quoc-Nam Tran,
Nikolay Vasiliev, Stephen Watt, Michael Wester (co-founder of the ACA conference series),
Wolfgang Windsteiger, Franz Winkler

General Chair: Margarita Spiridonova

Program Chairs: Victor Edneral,
Nikolay Vassiliev, Stephen Watt

Local Chair: Stefan Dodunekov

Advisory Committee: Eugenio Roanes-Lozano,
Stanly Steinberg, Michael Wester

Local Organizer

Institute of Mathematics and Informatics
at the Bulgarian Academy of Sciences

Local Organizing Committee

Stefan Dodunekov (Chair), Krassimira Karabasheva, Rossitza Petrova,
Snejana Staneva, Elena Varbanova