

## THEORETICAL COMPUTER SCIENCE SPECIAL ISSUE on

# Symbolic and Numeric Computation SNC 2009, Call For Papers

This special issue will include selected refereed papers on Symbolic and Numerical Computation presented at the SNC 2009 conference held August 3-5, 2009 in Kyoto Japan

http://www.snc2009.cs.ehime-u.ac.jp/ as well as other relevant papers in this subject area.

#### **Guest Editors:**

Ilias S. Kotsireas Wilfrid Laurier University Department of Physics and Computer Science 75 University Avenue West Waterloo, Ontario N2L 3C5 CANADA e-mail: ikotsire@wlu.ca http://www.wlu.ca/science/physcomp/kotsireas/

Bernard Mourrain **EPI GALAAD** INRIA Méditerranée 2004 route des Lucioles, B.P. 93, 06902 SOPHIA ANTIPOLIS, Cedex FRANCE e-mail: Bernard.Mourrain@sophia.inria.fr

http://www-sop.inria.fr/galaad/mourrain/

Victor Y. Pan

Department of Mathematics and Computer Science Lehman College and the Graduate Center City University of New York Bronx, NY 10468, USA

e-mail: victor.pan@lehman.cuny.edu http://comet.lehman.cuny.edu/vpan/ Two previous Special Issues of TCS on this subject have appeared:

- 2004 (vol. 315 (2-3), pp. 307-672)
- 2008 (vol. 409 (2), pp. 155-331)

All papers will be refereed according to the high standards of TCS.

Specific topics include, but are not limited to:

- Hybrid symbolic-numerical algorithms
- Symbolic-numerical computations with structured matrices and resultants
- Symbolic-numerical methods for polynomial equations and systems of equations
- Numerical computation of Groebner bases and characteristic sets
- Symbolic-numerical methods for geometric and algebraic-geometric computation
- Approximate polynomial GCD and factorization
- Approximate polynomial and rational decompositions and interpolation
- Approximate algebraic algorithms
- Symbolic methods for numerical stabilization
- Stabilization of algebraic algorithms
- Symbolic-numerical methods for differential equations
- Symbolic-numerical algorithms for nonlinear optimization
- Implementation of symbolic-numerical algorithms
- Applications of symbolic-numerical computation

### **Paper Submission:**

Authors are encouraged to submit their work by e-mail to all Guest Editors. The preferred format of the submission is a .pdf file attachment. All paper submissions will be explicitly acknowledged by at least one of the Guest Editors.

In the case of explicit requests of the prospective contributors the next announcement may grant a minor extension of the submission deadline



## **Important Dates:**

Submission deadline: November 30, 2009 Author Notification: May 30, 2010

Camera ready:July 2010