

CFP: CP06 WS on Interval Analysis and Constraint Propagation

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(we apologize for possible multiple reception of this call)

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CALL FOR PAPERS

IntCP 2006 workshop
Interval Analysis and Constraint Propagation for Applications
<http://liawww.epfl.ch/Events/IntCP2006>

Cité des Congrès, Nantes, France
September 25th, 2006

Held in conjunction with the
Eleventh International Conference on Principles
and Practice of Constraint Programming (CP 2006)
(<http://www.sciences.univ-nantes.fr/cp06>)

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* Important Dates:

02 July 2006 – Submission deadline
20 July 2006 – Notification of acceptance
31 July 2006 – Final camera-ready copies
25 Sept 2006 – Workshop day

* Description and goals:

The goal of this workshop is to bring together researchers and practitioners working on constraint propagation and interval analysis, providing a forum to present ongoing research and practices and to discuss techniques for real-world requirements.

Constraint propagation, or range reduction, is appealing for solving numerical problems in a constraint programming or global optimization fashion because it guarantees two essential properties:

- completeness which means the ability to find all solutions if any, or else to prove that there are no solutions to the problem,
- rigor which means that the rounding errors due to floating-point

computation can be rigorously controlled.

Completeness and rigor are essential in numerous practical applications such as engineering design, robotics, control, logistics, manufacturing, chemical and biological sciences and computer-aided design to name a few.

The workshop aims at exploring the complementarity of different approaches and how it can be used to produce practical powerful solvers. Other topics often relevant in applications are:

- specific reduction techniques;
- uncertainty handling techniques;
- specific problem structures exploitation;
- mixture of discrete and continuous variable domains;
- specific techniques for underconstrained problems;
- solution selection by means of preferences or "browsing".

We seek contributions that address such questions, and present relevant software tools, algorithms, theoretical results, or applications of constraint propagation and interval analysis techniques oriented toward real-world problems. We particularly encourage the presentation of work that bridge the gap between theory and practice.

* Submissions:

People wishing to give a talk should submit an extended abstract of at least 2 pages. Submissions must be formatted using LNCS packages (see CP formatting instructions). The title page should include the name, address and electronic mailing address for each author.

Please, email all submissions in postscript or pdf format to
** intcp-sub@xxxxxxx ** by July 2nd 2006, specifying the name of the contact author in the message.

Submissions will be reviewed by at least one committee member, and will be selected on the basis of their adequation to the topic of the workshop. Authors will receive feedback in the form of reviewers' comments.

The accepted papers will appear in the workshop notes, which will be distributed to the participants. At least one author of each accepted submission must attend the workshop to present the paper.

* Accomodation/Registration:

Accomodation is provided by the hosting conference CP 2006. All workshop attendees must pay the workshop fee. It is however possible to attend the workshop without paying the CP 2006 regular registration fee.

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* Committee:

P. Barahona, University of Lisbon, Portugal
M. Ceberio, UTEP, USA
D. Daney, INRIA, France
L. Jaulin, ENSIETA Brest, France
C. Jermann, University of Nantes, France
Y. Lebbah, University of Oran, Algeria
S. Ratschan, Max-Planck Institut für Informatik, Germany
N. Sahinidis, UIUC, USA
D. Sam, EPFL, Switzerland
J. Vehi, University of Girona, Spain

* Contacts:

Send questions about the workshop to : intcp-sub@xxxxxxx

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