

# CALL FOR PAPERS

## COMPUTER AIDED VERIFICATION

*17th International Conference*

*July 6 – 10, 2005, University of Edinburgh, Scotland, UK*

<http://www.cav2005.inf.ed.ac.uk>

### Program Chairs

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### Program Committee

Rajeev Alur, U. Penn  
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Alessandro Cimatti, IRST, Trento  
Edmund R. Clarke, CMU  
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Kousha Etessami, U. Edinburgh  
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Helmut Veith, TU Munich  
Thomas Wilke, Kiel U.  
Yaron Wolfsthal, IBM Haifa  
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### Steering Committee

Edmund M. Clarke, CMU  
Mike Gordon, U. Cambridge  
Robert P. Kurshan, Cadence  
Amir Pnueli, NYU

**Aims and Scope.** CAV'05 conference is the 17th in a series dedicated to the advancement of the theory and practice of computer-assisted formal analysis methods for software and hardware systems. The conference covers the spectrum from theoretical results to concrete applications, with an emphasis on practical verification tools and the algorithms and techniques that are needed for their implementation. The proceedings of the conference will be published in the Springer-Verlag Lecture Notes in Computer Science series. Sample topics of interest include:

- Algorithms and tools for verifying models and implementations
- Deductive, compositional, and abstraction techniques for verification
- Modeling and specification formalisms
- Program analysis and software verification
- Testing and runtime analysis based on verification technology
- Applications and case studies
- Verification in industrial practice

### Invited Speakers:

Bob Bentley(Intel), "*Validating a modern microprocessor.*"  
Bud Mishra(NYU), "*What's Next? Challenges from Systems Biology.*"  
George Necula(Berkeley), "*Randomized algorithms for program analysis & verification.*"

### Tutorials:

Tutorial on "Automated abstraction refinement",  
by Thomas Ball (Microsoft Research) and Ken McMillan (Cadence).  
Tutorial on "Theory & practice of decision procedures for combinations of theories",  
by Clark Barrett (NYU) and Cesare Tinelli (U. Iowa).

### Satellite Events (July 11-12th):

BMC'2005: *3rd Int. Workshop on Bounded Model Checking.*  
FATES'2005: *5th Workshop on Formal Approaches to Testing Software.*  
GDV'2005: *2nd Workshop on Games in Design and Verification.*  
PDPAR'2005: *3rd Workshop on Prag. of Decision Procedures in Aut. Reasoning.*  
RV'2005: *5th Workshop on Runtime verification.*  
SoftMC'2005: *3rd Workshop on Software Model Checking.*  
"Satisfiability Modulo Theories competition": a special tools competition.

**Paper submission.** There are two categories of submissions:

- Regular papers. Submissions (in PS or PDF) should not exceed 13 pages using Springer's LNCS format (<http://www.springer.de/comp/lncs/authors.html>) with STANDARD margins. An additional clearly marked appendix may be included with the submission, to be read at the discretion of the program committee. Submissions deviating from these guidelines risk summary rejection. Submissions should contain original research, and sufficient detail to assess the merits of the contribution. For papers reporting experimental results, authors are strongly encouraged to make their data available with their submission. Simultaneous submission to other conferences with proceedings or submission of material that has already been published elsewhere is strictly forbidden.
- Tool presentations. Submissions, not exceeding four (4) pages using Springer's LNCS format with standard margins, should describe the implemented tool and its novel features. If necessary, an additional clearly marked appendix may be included with the submission, but will only be read at the discretion of the program committee. A demonstration is expected to accompany a tool presentation. Papers describing tools that have already been presented in this conference before will be accepted only if significant and clear enhancements to the tool are reported and implemented.

The only mechanism for paper submissions is via the electronic submission web site, accessible via the conference homepage.

### Important dates.

**Paper submission (Extended & ABSOLUTELY FIRM): January 28, 2005**

Notification of acceptance/rejection: March 24, 2005

Final version due: April 29, 2005