15th International Conference on
Theory and Applications of Satisfiability Testing
SAT 2012

Trento, Italy, June 17-20, 2012
`http://sat2012.fbk.eu/`

Dates:

Abstract due:	05.02.12
Paper due:	12.02.12
Rebuttal phase:	28-30.03.12
Notification:	12.04.12
Final paper due:	04.05.12
SAT/SMT School:	12-15.06.12
Workshops:	16.06.12
Conference:	17-20.06.12

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Scope and Mission

The International Conference on Theory and Applications of Satisfiability Testing is the primary annual meeting for researchers studying the propositional satisfiability problem (SAT). Importantly, here SAT is interpreted in a rather broad sense: besides plain propositional satisfiability, it includes the domains of *MaxSAT* and *Pseudo-Boolean (PB)* constraints, *Quantified Boolean Formulae (QBF)*, *Satisfiability Modulo Theories (SMT)*, *Constraints Programming (CSP)* techniques for word-level problems and their propositional encoding. To this extent, many hard combinatorial problems can be encoded as SAT instances, in the broad sense mentioned above, including problems that arise in hardware and software verification, AI planning and scheduling, OR resource allocation, etc. The theoretical and practical advances in SAT research over the past twenty years have contributed to making SAT technology an indispensable tool in these domains.

Relevant Topics

The topics of the conference span practical and theoretical research on SAT (in the broader sense above) and its applications, and include, but are not limited to:

Theoretical issues: combinatorial theory of SAT, proof systems and proof complexity in SAT, analysis of SAT algorithms;

Solving: improvements of current solving procedures, novel solving procedures, techniques and heuristics, incremental solving;

Beyond solving: SAT functionalities (e.g., proofs, unsat-cores, interpolants,...), optimization;

Applications: SAT techniques for other domains, novel problem encodings, novel industrial applications of SAT.

Invited Speakers

Aaron Bradley "SAT-based Verification with IC3: Foundations and Demands"
Donald Knuth "Satisfiability and The Art of Computer Programming"

Affiliated Events

SAT'12 is co-located with the 2nd *International SAT/SMT Summer School* (June 12-15), `http://satsmtschool2012.fbk.eu/`.
SAT'12 will also host related events like workshops (June 16) and various competitive events.

Paper Submission

The proceedings of SAT'12 will be published by Springer in the LNCS series. Papers must be edited in LaTeX using the LNCS format and be submitted electronically via EasyChair. The review process will be subject to a rebuttal phase. We envisage three categories of submissions:

Regular papers. Submissions, not exceeding fourteen (14) pages, should contain original research, and sufficient detail to assess the merits and relevance of the contribution. For papers reporting experimental results, authors are strongly encouraged to make their data available with their submission. Submissions reporting on case studies in an industrial context are strongly invited, and should describe details, weaknesses and strength in sufficient depth. Simultaneous submission to other conferences with proceedings or submission of material that has already been published elsewhere is not allowed.

Tool presentations. Submissions, not exceeding six (6) pages, should describe the implemented tool and its novel features. A demonstration is expected to accompany a tool presentation. Papers describing tools that have already been presented in other conferences will be accepted only if significant and clear enhancements to the tool are reported and implemented.

Extended abstracts/Posters. Submissions, not exceeding two (2) pages, briefly introducing work in progress, student work, or preliminary results. These papers are expected to be presented as posters at the conference.

More details about scope, topics and paper submission are available at SAT'12 web page.