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SIGLOG NEWS

Published by the ACM Special Interest Group on Logic and Computation

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SIGLOG News (ISSN 2372-3491) is an electronic quarterly publication by the Association for Computing Machinery.
From the Editor

It is an absolute honour to be releasing the first issue of SIGLOG News, a new electronic quarterly newsletter published by ACM SIGLOG. I hope it will be enjoyable to read and will serve the Logic and Computation community for many years to come!

This first issue begins with a message from the first Chair of SIGLOG, Prakash Panangaden, who explains SIGLOG’s origin and mission. Next, the SIGLOG News column editors take turns laying out their vision for the five technical columns.

Automata
Complexity
Security & Privacy
Semantics
Verification

Mikołaj Bojańczyk
Neil Immerman
Matteo Maffei
Mike Mislove
Andrey Rybalchenko

In addition to technical columns, SIGLOG News will aim to feature all kinds of material relevant to Logic and Computation. Book reviews and reports from recent logic and computer science professional meetings are especially welcome. Please email your contributions to editor@siglog.org.

Enjoy SIGLOG News!

Andrzej Murawski
University of Warwick
SIGLOG News Editor
Chair's Letter

Welcome to SIGLOG!

Logic is often called the “calculus of computation” and computation has indeed been the source of a major revitalization of logic in the twentieth century. Modern computer science grew out of logico-philosophical considerations by Gödel, Turing, Church, Curry, Kleene, Post, Markov and others. Subsequently computation has stimulated developments in modal logic (temporal logic, dynamic logic, Hoare logic), proof theory, computability theory, finite model theory and the \( \lambda \)-calculus. In turn, central areas of modern computer science research are intimately tied up with logic; these include: computer-assisted verification, security and privacy, automated reasoning, programming languages, databases and complexity theory.

The executive committee and others who worked hard to set up SIGLOG are delighted to announce the formation of a new special interest group focussed on logic and computation. The officers are: Prakash Panangaden (Chair), Luke Ong (vice-Chair), Natarajan Shankar (Treasurer) and Alexandra Silva (Secretary). The officers will be assisted by an executive committee and an advisory committee. The formation of this SIG has taken a long time with a lot of effort put in by many people. The idea of such a SIG was first mooted in 2007 by Moshe Vardi and Dana Scott, and the first draft proposals were written by Vardi with input from Martín Abadi, Rajeev Alur and Phokion Kolaitis.

For a long time the logic and computation community has functioned without a unifying organization. It has, nevertheless, grown in numbers and diversity and there are now many conferences that testify to the vitality of the community. Indeed the FLoC cluster of conferences this Summer in Vienna is expected to attract 1500 participants. There are, however, many ways in which a community-wide organization can serve the community that a single-conference-based organization cannot.

SIGLOG aims to serve a broad range of interests. The flagship conference will be the ACM-IEEE Symposium on Logic in Computer Science. SIGLOG will actively seek association agreements with other conferences in the field. A SIGLOG newsletter is planned to be published quarterly in an electronic format with community news, technical columns, members’ feedback, conference reports, book reviews and other items of interest to the community. An important activity of SIGLOG will be advocating for the importance of logic in the undergraduate computer science curriculum. Another important activity will be the establishment of prizes to recognize the outstanding contributions made by leading members of the community. Several members of the community have won Turing prizes, but there is room for much more recognition, especially for younger researchers. SIGLOG will collaborate closely with like-minded organizations like EATCS and EACSL. We are also seeking to cooperate with as other organizations, such as the Gödel Society, the Association for Symbolic Logic and IFCOLOG. Within the ACM family we have several SIGs that have overlapping interests, notably SIGACT and SIGPLAN. SIGLOG will maintain close ties with the ACM Transactions on Computational Logic. The upcoming Federated Logic Conferences in Vienna (part of
the Vienna Summer of Logic) will feature a pair of SIGLOG launch events on the 15th and 22nd of July.

In addition to the SIGLOG executive committee there are a number of standing committees that we are in the process of setting up. Some committees are more or less ready to go, others are in need of members (volunteers welcome!).

(1) Publicity Committee: Andrzej Murawski, chair and editor of SIGLOG Newsletter; Prakash Panangaden, Alexandra Silva, Website coordinator; Daniela Petrișan.

(2) Conference committee: Catuscia Palamidessi (chair), more members TBA.

(3) Awards Committee: Prakash Panangaden (chair), Anuj Dawar, Luca Aceto, Samson Abramsky, Rajeev Alur.

(4) Education Committee: Brigitte Pientka, Val Tannen, Sophia Knight, more members TBA. Chair TBA

(5) Membership committee: Dirk Pattinson (Australia), more TBA. Chair TBA.

The website is set up and accessible at siglog.acm.org. I am very grateful to Alexandra Silva and Daniela Petrișan for their effort to put together the website. This Newsletter will, I hope, be a valuable resource for the community. Apart from containing news about conferences and events, I hope that everyone will find the columns instructive and interesting. There will be 5 columns that will appear in the Newsletter (not necessarily 5 in every issue): Automata edited by Mikołaj Bojańczyk, Complexity edited by Neil Immerman, Security and Privacy edited by Matteo Maffei, Semantics edited by Michael Mislove and Verification edited by Andrey Rybalchenko. I am thrilled to be able to assemble such an outstanding cast of column editors.

SIGLOG seeks to be an inclusive and diverse organization. We are committed to encouraging the participation of women in computing and are pleased to note that there are many outstanding women leaders in the research areas covered by SIGLOG. We actively seek members from all geographical regions and from a broad variety of research interests. A membership form can be found on the last page of this newsletter.

Prakash Panangaden
McGill University
ACM SIGLOG Chair
It will be my great pleasure and honour to edit the column on automata in the SIGLOG newsletter. The study of connections between logic and automata has seen a lot of development in recent years, and seems to be in robustly good shape. For instance, among the best paper awards for ICALP Track B in the years 2000-2013, all but five awarded papers had the words “automaton” or “regular language” in the title and, of the remaining five, two were also about automata theory. Also promising is a large number of strong new researchers, which means that the field is likely to be around in ten years.

As column editor, I would like the column to include at least two kinds of articles, described below.

— *Expository articles about the theory*. This category includes short surveys of recent developments, and simple proofs of classical results of automata theory. For the simple proofs, the best would be a proof from God's Book, but if you have something that would only make it to a newsletter subscribed by God, then that is still good enough for this column. Such a proof should be presentable by a competent master's student in one or two seminars. If you have such a proof, preferably with pictures, then please let me know and don’t wait for that textbook that you will write when you finally have some free time.

— *What are the applications of advanced automata theory?* I would like this column to publish testimonials of people who have done work that is both theoretical and applied. The purpose of such testimonials would be to shed some light on the applicability of the more advanced notions of automata theory, i.e. the notions that are currently being researched. I believe that such light is needed, because automata theory is full of things that look like they might be applicable, but are not necessarily so, and many of us (myself included) have never made an honest effort to check. When lying in the introductions of papers and grant applications, we should at least know when we are lying.

I will be very happy if you send me suggestions for such articles, or even the articles themselves. And do not feel limited by the description above, the format of the column is flexible.
I am pleased to announce that I will be editing a quarterly column on Logic and Complexity for the SIGLOG newsletter. The topic of logic and complexity is quite broad: computational complexity is a central issue for most areas in logic and computer science. While checking if a program has a certain property, or more generally if a statement is true, is typically undecidable, as a community we have made great progress in developing algorithms and building tools that perform these tasks in many useful cases. Similarly we have shown that many key problems are complete for a wide range of complexity classes.

It will be very natural to have complexity and logic columns covering topics such as proof complexity, constraint-satisfaction, database theory, descriptive complexity, complexity of games, etc. Less obvious, but also very desirable, will be columns talking about such amazing topics as the complexity of SAT — we've known since 1971 that SAT was NP complete and thus presumed “hard”, however, in the last decade or so SAT and SMT solvers have broken size and time barriers making them extremely useful in practice. To cover such topics, columns written jointly by a practitioner and a theoretician would be great.

I welcome theoretical and applied topics from academia and from industry. Columns will be five to ten pages, and must be self-contained enough to be understandable — with some effort — by second-year graduate students. Many columns will focus on new breakthroughs and the series of ideas that led to them. More general surveys of recent directions and progress in an area will also be most welcome. I will strive to have clearly written columns; I see this column not only as a resource for the SIGLOG community, but also for researchers in other areas of computer science wanting to learn about current work.

I will be reaching out to various people, but I also would be very pleased to receive suggestions of people to write and topics to cover. The idea of this column is to cover our area broadly and yet in depth; I may be leading the column, but success will depend on all of you. So please don't be shy if I haven't asked you yet; let me thank you in advance for ideas for columns written by yourself or others.
Security and data privacy play today a central role in the digital society. For instance, cyber attacks against nuclear power plants, such as the Stuxnet virus, shed a light on the disruptive potential of cyberwarfare and cyberterrorism on our society, pushing governments and industries to make plans to protect a large spectrum of critical sectors. As a further example, the widespread adoption of web and mobile technologies for carrying on commercial activities has made client devices as well as service providers a profitable, and unfortunately frequent, target of hackers and cyber criminals. Finally, privacy scandals systematically gain the headlines of newspapers, making the public opinion more and more conscious and critical about the exposure of sensitive data in the digital world. The complexity of the digital ecosystem makes the definition and enforcement of security and privacy properties a formidable challenge, which manual design and analysis techniques proved inadequate to tackle. This state of affairs calls for rigorous approaches, backed up by a formal reasoning and supported by mechanized procedures. The scientific research has shown, in particular, how logical frameworks and program verification techniques, originally developed to define and certify the correctness of programs, constitute a solid basis on top of which it is possible to build powerful and innovative tools for rigorously reasoning about security and privacy in the digital society. Indeed, the design of formal methods for security and privacy proved over the years a flowering and extraordinarily active research area, which has seen exciting contributions from a variety of disciplines at the core of SIGLOG, such as logic, semantics, automated deduction, and verification. This research field has tons of success stories and many open challenges on its horizon: among the former, I like to mention cryptographic protocol analysis, access control models, and information flow security, while the latter include, for instance, web security, mobile security, data privacy, and cybersecurity.

At the light of that, I accepted with enthusiasm the invitation of Prakash to lead a column of the SIGLOG newsletter dedicated to security and privacy. I believe this is an excellent opportunity to highlight and foster contributions to these research fields from the logic and computation community. In particular, I envision this column as a venue to publish \textit{systematization of knowledge papers} describing success stories; \textit{position papers} opening new research directions; and, last but not least, \textit{interviews} and \textit{opinion pieces} on any topic of mutual interest to the logic and security communities. I invite all interested colleagues to contribute to this column and I look forward to seeing it disseminate the impact of the SIGLOG community on the security and privacy in the digital society.
It's wonderful that SIGLOG is now a reality, thanks to the hard work of so many. It's also an honor to be asked to edit the semantics column for the new SIGLOG Newsletter. In this first column, I want to lay out my goals for the column, and also issue an invitation. The goal is simple: I want this column to be a venue for news of interest to the semantics community, and also to serve as a place where readers from all areas represented within the SIGLOG community can learn about the latest advances in semantics and related areas where semantics plays a role. This includes new research results about the mathematical and logical principles on which semantic models are built, as well as advances in how and where those models are applied. I also hope to include some historical pieces that describe how various advances came about.

I interpret semantics in a broad sense - it includes the wide range of logical and mathematical techniques that are used to provide models to reason about computational processes. In its early years (say, 1970-1990), semantics research focused on denotational semantics, the area pioneered by Dana Scott and Christopher Strachey. This area gave rise to the mathematical discipline called domain theory, which describes the mathematical structures that most often are used to give meanings to programming language constructs. But there are many other approaches that also are used for semantics: in denotational semantics, this includes topological spaces, metric spaces, discrete and probabilistic transition systems, as well as logical systems that can be used to reason directly about programs. There also are game semantics and the plethora of categorical models that have been developed, which has its origins in the correspondence between Cartesian closed categories and models of the lambda calculus, and which also led to the recognition that algebras and coalgebras of endofunctors on appropriate categories can form semantic models. More broadly, there are operational models that are useful for understanding how processes evolve, and there are logics that are useful for devising proof rules for reasoning about program properties. All of these aspects are included in the column, and many more that I haven't mentioned.

In addition to the logical and mathematical systems that are used in semantics, the column also welcomes discussions of the applications of semantic modeling techniques to other areas of computer science and related disciplines. One example is the recent development of categorical models for quantum computing and to quantum information; another is the application of concurrency to systems biology. This column also welcomes discussions of alternative approaches to modeling computation. There is the recent rise in interest in probabilistic models as one example, where the developments around labeled Markov processes have had a strong impact. This leads directly to considerations involving (probabilistic) model checking and the many tools that are being
used in that regime, as well as the use of theorem provers. This brings us right back to semantics, where languages like Agda are being used to automatically prove basic theorems. As a final example, the developments in HoTT, Homotopy Type Theory, which represents a unique blend of the foundations of computer science, type theory, logic and algebraic topology, is another compelling example of the exciting work taking place. All of this is welcome, and much more.

Those of you who know me probably also know of the Mathematical Foundations of Programming Semantics Conference series that I help organize. MFPS held its 30th annual meeting the year (it predates LICS!), and the reasons it has survived are (1) it welcomes logicians, mathematicians and computer scientists in a setting that encourages interactions and discussions of problems of common interest, and (2) it encourages the presentation of research in new areas where the problems and interests of those involved in semantics are potentially useful. I hope to bring this same open atmosphere to this column - in addition to columns about semantics in the narrow sense, I hope to attract guest columns by experts in related areas, whose topics will find an interested audience eager to learn of new problems that the techniques semantics has developed might be useful in solving. Likewise, the techniques from these related areas may prove useful for solving problems in semantics, or in its application to new and interesting disciplines.

Having said all this, I welcome comments about the structure of the column - what readers would like to see included. For example, if there's a topic of potential interest, tell me about it, and I'll try to arrange a column by an expert.

And now for that invitation. When Prakash invited me to author this column, I responded that I would be interested in editing the column, but that I'd prefer to have experts in various areas contribute guest columns. So I am hereby issuing an invitation to any SIGLOG member interested in telling the semantics community about something they think is worthy of its attention to write me with a proposal for a column. I plan to take the role of editor seriously, by evaluating the proposals, selecting those that seem most appealing, and then editing the proposed columns to try to reach some uniformity in presentation, clarity and style. So please send me your proposals - I look forward to receiving them.

Finally, I have a number of themes I'd like to see presented in this space, some of which I've mentioned above, and I am already contacting colleagues soliciting contributions for the column. So look for the first real column in the fall.
1. VERIFICATION

Verification can be described as a process applying logical reasoning to mathematical models of computation. Often these models represent software and hardware systems or their components, however, various other application domains, for example, systems biology, can also benefit from verification techniques.

Verification has several interesting and important goals. Improving quality and trustworthiness of software and hardware by finding bugs or proving their absence is among the most prominent verification objectives. Besides discovery of (counter-)proofs verification can also lead to insights why a system works in a particular way, or how an alteration of some system parts impacts its overall properties.

Technically, verification builds upon a vast collection of mathematical and logical theories and techniques, data structures and algorithms, as well as engineering and system building expertise.

2. FUTURE ISSUES

Current plan for this column is to look into various aspects of verification theory and practice, and highlight selected contributions through articles contributed by experts.

Most likely any attempt to identify a golden recipe for an interesting column in advance will not work out as desired. Hence the column will probably develop its own life, by reacting to exciting new developments and covering particularly interesting new discoveries, while also looking back at what proven to be foundational and providing a perspective.

It is difficult to be fair in presence of the diversity of approaches, applications, directions that verification is taking. Software verification and symbolic reasoning methods might receive slightly more attention until some adequate balance of topics settles in, which is a process that could greatly benefit from readers’ feedback directed at the column editor.

3. WHAT’S NEXT

The next issue could activate the column by presenting a successful verification project (or two), uncovering its foundation and hopefully getting some preview of the future. Stay tuned!
CALLS

VIENNA SUMMER OF LOGIC
July 9-24, 2014
Vienna, Austria
http://vsl2014.at

GENERAL. In the summer of 2014, Vienna will host the largest event in the history of logic. The Vienna Summer of Logic (VSL) will consist of twelve large conferences and numerous workshops, attracting an expected number of 2500 researchers from all over the world. The conferences and workshops will deal with the main theme, logic, from three important aspects: logic in computer science, mathematical logic and logic in artificial intelligence. This unique event will be organized by the Kurt Goedel Society at Vienna University of Technology from July 9 to 24, 2014.

KEYNOTE SPEAKERS. Franz Baader (Technische Universitaet Dresden), Edmund Clarke (Carnegie Mellon University), Christos Papadimitriou (University of California, Berkeley) and Alex Wilkie (University of Manchester). Dana Scott (Carnegie Mellon University) will speak in the opening session.

LOGIC IN COMPUTER SCIENCE/FEDERATED LOGIC CONFERENCE (FLoC).
— 26th International Conference on Computer Aided Verification (CAV)
— 27th IEEE Computer Security Foundations Symposium (CSF)
— 30th International Conference on Logic Programming (ICLP)
— 7th International Joint Conference on Automated Reasoning (IJCAR)
— 5th Conference on Interactive Theorem Proving (ITP)
— Joint meeting of the 23rd EACSL Annual Conference on Computer Science Logic (CSL) and the 29th ACM/IEEE Symposium on Logic in Computer Science (LICS)
— 25th International Conference on Rewriting Techniques and Applications (RTA) joint with the 12th International Conference on Typed Lambda Calculi and Applications (TLCA)
— 17th International Conference on Theory and Applications of Satisfiability Testing (SAT)
— FLoC Workshops
— FLoC Olympic Games (System Competitions)

MATHEMATICAL LOGIC.
— Logic Colloquium 2014
— Logic, Algebra and Truth Degrees 2014
— The Infinity Workshop
— Kurt Goedel Fellowship Competition

LOGIC IN ARTIFICIAL INTELLIGENCE.
— 14th International Conference on Principles of Knowledge Representation and Reasoning (KR)
— 27th International Workshop on Description Logics (DL)
— 15th International Workshop on Non-Monotonic Reasoning (NMR)
— International Workshop on Knowledge Representation for Health Care 2014 (KR4HC)
KURT GOEDEL RESEARCH PRIZE FELLOWSHIP COMPETITION. At the Vienna Summer of Logic, the Kurt Goedel Society will award three fellowship prizes endowed with 100,000 Euro each to the winners of the Kurt Goedel Research Prize Fellowship Competition “Logical Mind: Connecting Foundations and Technology.”

FLOC OLYMPIC GAMES - CITIUS, MAIUS, POTENTIUS. The Federated Logic Conference (FLoC) 2014 will host the 1st FLoC Olympic Games. Intended as a new FLoC tradition, the Games will bring together a multitude of established solver competitions by different research communities. In addition to the competitions, the Olympic Games will facilitate the exchange of expertise between communities, and increase the visibility and impact of state-of-the-art solver technology. The winners in the competition categories will be awarded Kurt Goedel medals at the FLoC Olympic Games award ceremonies.

34TH FOUNDATIONS OF SOFTWARE TECHNOLOGY AND THEORETICAL COMPUTER SCIENCE (FSTTCS)

December 15-17, 2014
India International Centre, New Delhi, India
http://www.fsttcs.org

GENERAL. IARCS, the Indian Association for Research in Computing Science, announces the 34th Foundations of Software Technology and Theoretical Computer Science conference at India International Centre, New Delhi, India. The FSTTCS conference is a forum for presenting original results in foundational aspects of Computer Science and Software Technology. Representative areas include, but are not limited to, the following: Algorithms and data structures (randomized algorithms, approximation algorithms, distributed algorithms, geometric algorithms, online and streaming algorithms, fixed-parameter tractability, graph algorithms), Computational complexity (circuits, communication complexity, proof complexity, structural complexity, pseudorandomness, PCPs, inapproximability), Combinatorial optimization, Game theory and mechanism design, Quantum computing, Computational biology, Cryptography and security, Automata and formal languages, Concurrent, timed and hybrid systems, Logic in computer science (finite model theory, modal and temporal logics, specification, verification, synthesis), Programming languages (semantics, types, program analysis and correctness).

SUBMISSIONS. Submissions will be in electronic form via EasyChair using the LIPIcs LaTeX style file (see http://www.dagstuhl.de/en/publications/lipics/instructions-for-authors). Submissions must not exceed 12 pages (including bibliography). Simultaneous submissions to journals or other conferences with published proceedings are disallowed. Accepted papers will be published as proceedings of the conference in the Leibniz International Proceedings in Informatics (LIPIcs) as a free, open, electronic archive with access to all. For an accepted paper to be included in the proceedings, one of the authors must commit to presenting the paper at the conference.

IMPORTANT DATES.
— Abstract Submission deadline: July 11, 2014
— Paper Submission deadline: July 18, 2014
— Notification to Authors: September 15, 2014
— Deadline for camera-ready papers: October 15, 2014

IMPORTANT LINKS.
http://www.fsttcs.org
INVITED SPEAKERS. Nikhil Bansal (TU Eindhoven), Paul Gastin (LSV, ENS Cachan), Martin Grohe (RWTH Aachen), Orna Kupferman (Hebrew University), Ryan Williams (Stanford University)

PC CHAIRS. Venkatesh Raman (IMSc, Chennai), S P Suresh (CMI, Chennai)

ORGANIZING COMMITTEE. Shweta Agrawal (IIT Delhi), Naveen Garg (IIT Delhi), Ragesh Jaiswal (IIT Delhi, chair), Amit Kumar (IIT Delhi), Sanjiva Prasad (IIT Delhi), Sandeep Sen (IIT Delhi)

JOINT MEETING OF EACSL ANNUAL CONFERENCE ON COMPUTER SCIENCE LOGIC AND ANNUAL ACM/IEEE SYMPOSIUM ON LOGIC IN COMPUTER SCIENCE (CSL-LICS’14)
July 14-18, 2014
Vienna, Austria
http://lii.rwth-aachen.de/lics/csl-lics14/

GENERAL. This year LICS and CSL will hold a joint conference for the first time, as part of FLoC 2014 and the Vienna Summer of Logic. Tom Henzinger and Dale Miller are co-chairs of a joint PC of 38 members. The proceedings will be published by ACM. The list of accepted papers and the schedule are available online.

INVITED SPEAKERS.

— Christel Baier (TU Dresden), Patrick Cousot (ENS Paris and NYU)
— Tutorials: Assia Mahboubi (INRIA Saclay), Jasmin Fisher (MSR Cambridge)

AFFILIATED WORKSHOPS.

— Workshop Block 1 (July 12-13)
  CL&C 5th International Workshop on Classical Logic and Computation
  DCM 10th Int’l Workshop on Developments in Computational Models
  DTP Dependently-Typed Programming
  GSB Workshop on Gentzen Systems and Beyond 3
  LCC Workshop on Logic and Computation
  LINEARITY 3rd International Workshop on Linearity
  LOLA 5th Workshop on Syntax and Semantics of Low-Level Languages
  LSB 5th International Workshop on Logic and Systems Biology
  PC FLoC Workshop on Proof Complexity
  SD 3rd Workshop on Structures and Deduction
— Workshop Block 2 (July 17-18)
AWARDS. The Kleene Award for Best Student Paper will be given for the best student paper(s), as judged by the program committee. The EACSL Outstanding Dissertation Award, named for Wilhelm F. Ackermann, will be presented during the joint meeting. The LICS Test-of-Time Award 2014 will be presented during the joint meeting.

6TH INDIAN CONFERENCE ON LOGIC AND ITS APPLICATIONS (ICLA 2015)

January 8-10, 2015
IIT Bombay, India
http://www.cse.iitb.ac.in/~icla15/index.html

HISTORY. ALI, the Association for Logic in India, announces the sixth edition of its biennial International Conference on Logic and its Applications (ICLA), to be held at the Indian Institute of Technology, Bombay, from January 8 to 10, 2015. ICLA 2015 will be co-located with the 14th Asian Logic Conference to be held during January 5-8, 2015.

SCOPE. ICLA is a forum for bringing together researchers from a wide variety of fields that formal logic plays a significant role in, along with mathematicians, philosophers and logicians studying foundations of formal logic in itself. A special feature of this conference is the inclusion of studies in systems of logic in the Indian tradition, and historical research on logic. Details of the last ICLA (2013) may be found at http://www.imsc.res.in/~icla/. The earlier events in this series featured many eminent logicians as invited speakers, and we are pleased to announce that this year’s speakers will include:
- Steve Awodey, Carnegie Mellon University
- J. Michael Dunn, Indiana University Bloomington

SUBMISSIONS. Authors are invited to submit papers presenting original and unpublished research in any area of logic and applications. Articles on mathematical and philosophical logic, foundations and philosophy of mathematics and the sciences, history of logic, Indian systems of logic, use of formal logic in areas of theoretical computer science and artificial intelligence, or on the relationship between logic and other branches of knowledge, are welcome.

IMPORTANT DATES.
— Deadline for Submission: 5 August 2014
— Notification to Authors: 30 September 2014
IMPORTANT LINKS.
http://ali.cmi.ac.in
http://www.cse.iitb.ac.in/~icla15/index.html

PROGRAM CHAIRS. Mohua Banerjee (IIT Kanpur), Krishna S. (IIT Bombay)

CONTACT. Any queries related to the conference may be sent to the following email address: icla15@cse.iitb.ac.in

8TH INTERNATIONAL IFIP CONFERENCE ON THEORETICAL COMPUTER SCIENCE 2014 (IFIP-TCS)
September 1-3, 2014
Rome, Italy

GENERAL. The conference Theoretical Computer Science, which is held every two years, either in conjunction with or in the framework of the IFIP World Computing Congress, is the meeting place of the TC1 (IFIP Technical Committee on Foundations of Computer Science) community where new results of computation theory are presented and more broadly experts in theoretical computer science meet to share insights and ask questions about the future directions of the field.

25TH CONFERENCE ON CONCURRENCY THEORY (CONCUR 2014)
September 1-6, 2014
Rome, Italy
http://concur2014.org

GENERAL. The 25th Conference on Concurrency Theory will take place in Rome, from September 2nd to 5th, 2014. It will be co-located with the 9th International Symposium on Trustworthy Global Computing, September 5th and 6th, Theorical Computer Science Conference September 1st-3rd, and with a few more workshops on September 1st and 6th. The purpose of the CONCUR conferences is to bring together researchers, developers and students in order to advance the theory of concurrency and promote its applications. Since its birth, in 1990, it has been the reference annual event for this research field. The event will be hosted by Sapienza Universita di Roma and co-organized by the University of Padova. It will be located in the heart of the Eternal City, a few steps from the Colosseum.

KEYNOTE SPEAKERS. Javier Esparza (Munich), Jane Hillston (Edinburgh, joint with IFIP TCS), Catuscia Palamidessi (Paris, joint with TGC), Vasco Vasconcelos (Lisboa)

25TH ANNIVERSARY SPEECH. Tony Hoare

AFFILIATED WORKSHOPS.

EXPRESS/SOS 2014 Combined 21st International Workshop on Expressiveness in Concurrency and 11th Workshop on Structured Operational Semantics
YR-CONCUR Young Researchers Workshop on Concurrency Theory
BEAT 2014 3rd International Workshop on Behavioural Types
FOCLASA 2014 13th International Workshop on Foundations of Coordination Languages and Self-Adaptation
PV Workshop on Parameterized Verification
TRENDS event organised by IFIP WG 1.8
SCOPE. Authors are invited to submit papers presenting original and unpublished research on theoretical aspects of computer science. Typical areas include (but are not limited to):

— algorithms and data structures, including: parallel, distributed, approximation, and randomized algorithms, computational geometry, cryptography, algorithmic learning theory, algorithmic game theory, analysis of algorithms;
— automata and formal languages;
— computational complexity, parameterized complexity, randomness in computation;
— logic in computer science, including: semantics, specification and verification, rewriting and deduction;
— current challenges, for example: natural computing, quantum computing, mobile and net computing.

PC CHAIRS. Ernst W. Mayr (TUM, Munich), Nicolas Ollinger (LIFO, Orleans)

INVITED SPEAKERS. Sanjeev Arora (CS, Princeton), Manuel Bodirsky (CNRS, LIX, Palaiseau), Peter Sanders (KIT, Karlsruhe)

TUTORIAL. Felix Brandt (TUM, Munich), Computational Social Choice; tba: Algorithmic Game Theory

IMPORTANT DATES.
Submission website opens: Jun 22, 2014
Submission deadline: Sep 21, 2014 (23:59:59 GMT/UTC)
Rebuttal period: Nov 15 - 17, 2014
Notification: Dec 5, 2014
Final version due: Jan 7, 2015
Symposium: Mar 4 - 7, 2015

SUBMISSIONS. Authors are invited to submit a draft of a full paper with at most 12 pages (excluding the references section). The usage of pdflatex and the LIPIcs style file (see below) are mandatory; no changes to font size, page geometry etc. are permitted. Submissions not in the correct format or submitted after the deadline will not be considered.

The paper should contain a succinct statement of the issues and of their motivation, a summary of the main results, and a brief explanation of their significance, accessible to non-specialist readers. Proofs omitted due to space constraints must be put into an appendix, to be read by the program committee members at their discretion.

Simultaneous submission to other conferences with published proceedings or to journals is not allowed. PC members are excluded from submitting. As a novelty for STACS, there will also be a rebuttal period for authors. Authors will receive the reviews of their submissions (via EasyChair) on Nov 14/15 and have three days (Nov 15 - 17) to submit rebuttals (via EasyChair). These rebuttals become part of the PC meeting, but entail no specific responses. The submission site, which opens on Jun 22, 2014, is https://www.easychair.org/conferences/?conf=stacs2015
EUROPEAN JOINT CONFERENCES ON THEORY AND PRACTICE OF SOFTWARE (ETAPS)

April 11-19, 2015
London, UK
http://www.etaps.org

IMPORTANT DATES.
— Abstracts due: 10 October 2014 AoE
— Papers due: 17 October 2014 AoE
— Rebuttal (ESOP and FoSSaCS only): 3-5 December 2014
— Author notification: 19 December 2014
— Camera-ready versions: 16 January 2015

SUBMISSION INSTRUCTIONS. ETAPS conferences accept two types of contributions: research papers and tool demonstration papers. Both types will appear in the proceedings and have presentations during the conference. (TACAS has more categories, see below.) A condition of submission is that, if the submission is accepted, one of the authors attends the conference to give the presentation. Submitted papers must be in English presenting original research. They must be unpublished and not submitted for publication elsewhere. In particular, simultaneous submission of the same contribution to multiple ETAPS conferences is forbidden. The proceedings will be published in the Advanced Research in Computing and Software Science (ARCoSS) subline Springer's Lecture Notes in Computer Science series. Papers must follow the formatting guidelines specified by Springer at the URL http://www.springer.de/comp/lncs/authors.html and be submitted electronically in pdf through the Easychair (HotCRP) author interface of the respective conference. Submissions not adhering to the specified format and length may be rejected immediately.

RESEARCH PAPERS. Different ETAPS 2015 conferences have different page limits. Specifically, FASE, FOSSACS and TACAS have a page limit of 15 pages, whereas CC, ESOP and POST allow at most 20 pages. Additional material intended for reviewers but not for publication in the final version - for example, details of proofs - may be placed in a clearly marked appendix that is not included in the page limit. ETAPS reviewers are at liberty to ignore appendices and papers must be understandable without them. TACAS solicits not only regular research papers, but also case study papers.

TOOL DEMONSTRATION PAPERS. Submissions should consist of two parts. The first part, at most 4 pages, should describe the tool presented. Please include the URL of the tool (if available) and provide information that illustrates the maturity and robustness of the tool (this part will be included in the proceedings). The second part, at most 6 pages, should explain how the demonstration will be carried out and what it will show, including screen dumps and examples. (This part will be not be included in the proceedings, but will be evaluated.) ESOP and FOSSACS do not accept tool demonstration papers. In addition to tool demonstration papers (max 6 pages in their case), TACAS solicits also longer tool papers (max 15 pages) adhering to specific instructions about content and organization.
We close the first issue with an announcement of a logo competition. ACM SIGLOG is in urgent need of a logo! Accordingly, the SIGLOG Publicity Committee would like to invite all members of the community to come forward with their proposals. The logo should blend well with the colour scheme of the website, the SIGLOG News cover and the ACM logo. SIGLOG should be written with all capitals.

Please send your designs to publicity@siglog.org by October 31st, 2014. We expect to announce the winning entry by the end of the year 2014.
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