FEDERATED LOGIC CONFERENCE

FLoC 2010

PROGRAM
for the
FEDERATED LOGIC CONFERENCE

9 – 21 July 2010
Edinburgh, Scotland
United Kingdom

CONTENTS

1. Table of Contents
2. Welcome Statement
3. FLoC 2010 General Schedule
4. Social Events
5. Plenary/Keynote events
6. Information on Internet Access
7. About FLoC
8. Full FLoC 2010 Schedule
9. Information about Informatics
10. Edinburgh information
11. Maps

The photo on the cover appears courtesy of Kyriakos Kalorkoti.

Welcome Statement

During the past 50 years there has been extensive, continuous, and increasing interaction between logic and computer science. In many respects, logic provides computer science with both a unifying foundational framework and a modeling tool. Indeed, logic has rightly been called ``the calculus of computer science'', playing, as it does, a crucial role in such diverse areas such as artificial intelligence, computational complexity, distributed computing, database systems, hardware design, programming languages, and software engineering.

Since 1996, several conferences whose focus is on logic and computation have held a joint meeting every three or four years: the Federated Lofic Conference (FLoC). We are now pleased to welcome you to the FloC'10, the fifth such meeting. This takes place in Edinburgh, Scotland, from July 9th – 21th, and is hosted by the School of Informatics of the University of Edinburgh.

FLoC'10 consists of eight major conferences:

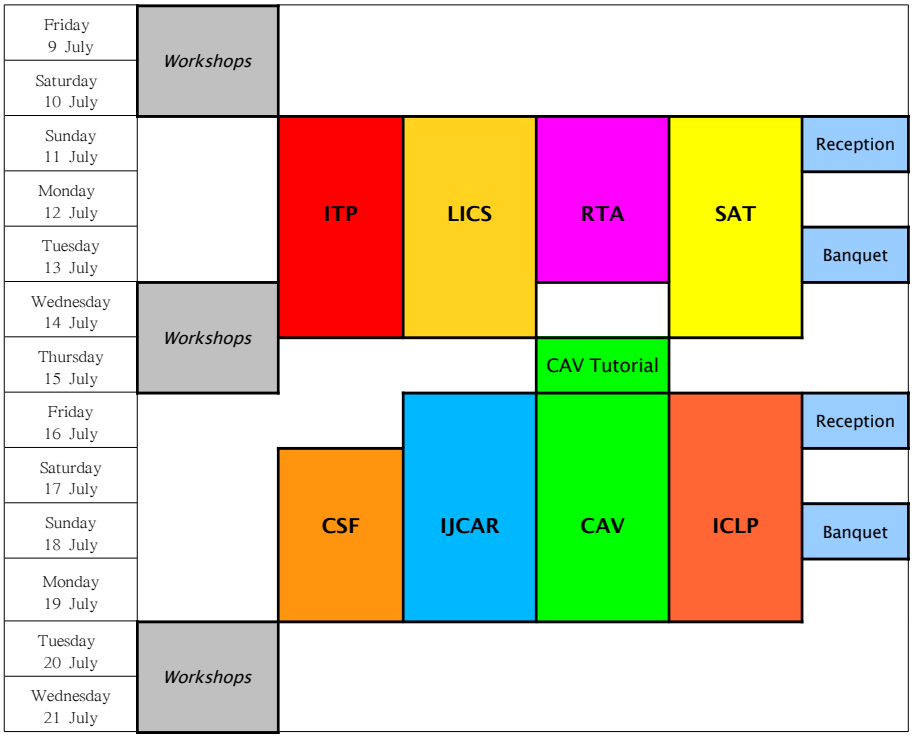
Conference on Computer-Aided Verification (CAV)
IEEE Computer Security Foundations Symposium (CSF)
International Conference on Logic Programming (ICLP)
International Joint Conference on Automated Reasoning (IJCAR)
International Conference on Interactive Theorem Proving (ITP)
IEEE Symposium on Logic in Computer Science (LICS)
Conference on Rewriting Techniques and Applications (RTA)
International Conference on Theory and Applications of Satisfiability Testing (SAT)

These include about a dozen plenary, keynote and invited talks, as well as tutorial days. Additionally, there are around 50 workshops.

FLoC'10 promises to be an exciting scientific event. Welcome!

Moshe Y. Vardi (FLoC 2010, General Chair)
Leonid Libkin, Gordon Plotkin (FLoC 2010 Conference Co-chairs)

Main Conferences

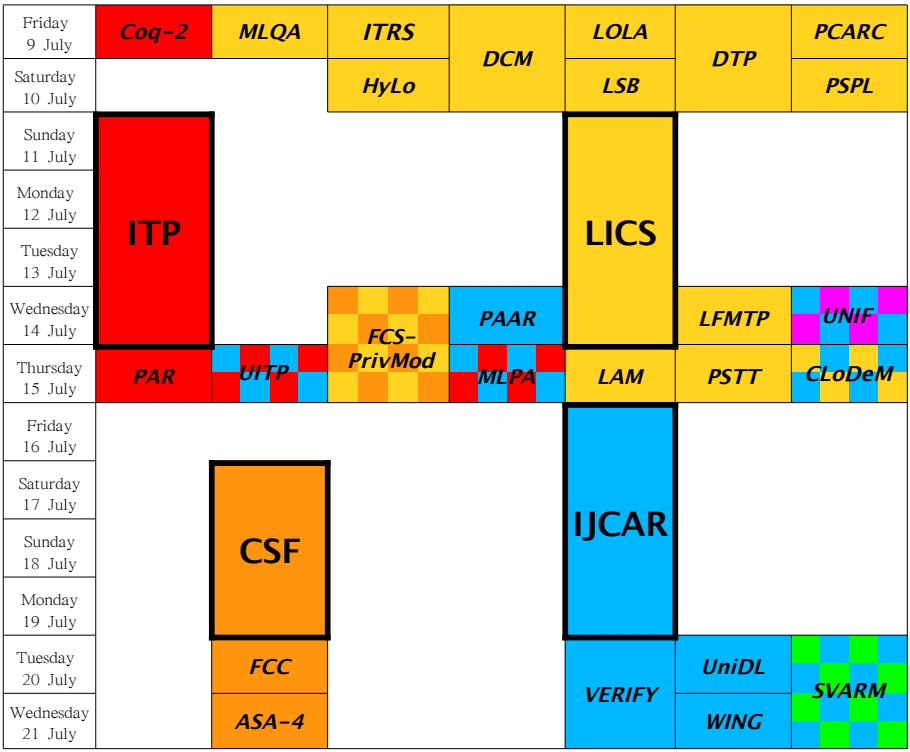


- All plenary and keynote talks will be held in the *George Square (GS) Lecture Theatre* (see the map at the end of the handbook) and are freely open to members of the public.
- Each main conference will be held in *Appelton Tower (AT)* (See the map).

  Block 1
  - LICS – Appleton Tower Lecture Theatre 4
  - ITP – Appleton Tower Lecture Theatre 5
  - RTA – Appleton Tower Lecture Theatre 3
  - SAT – Appleton Tower Lecture Theatre 2

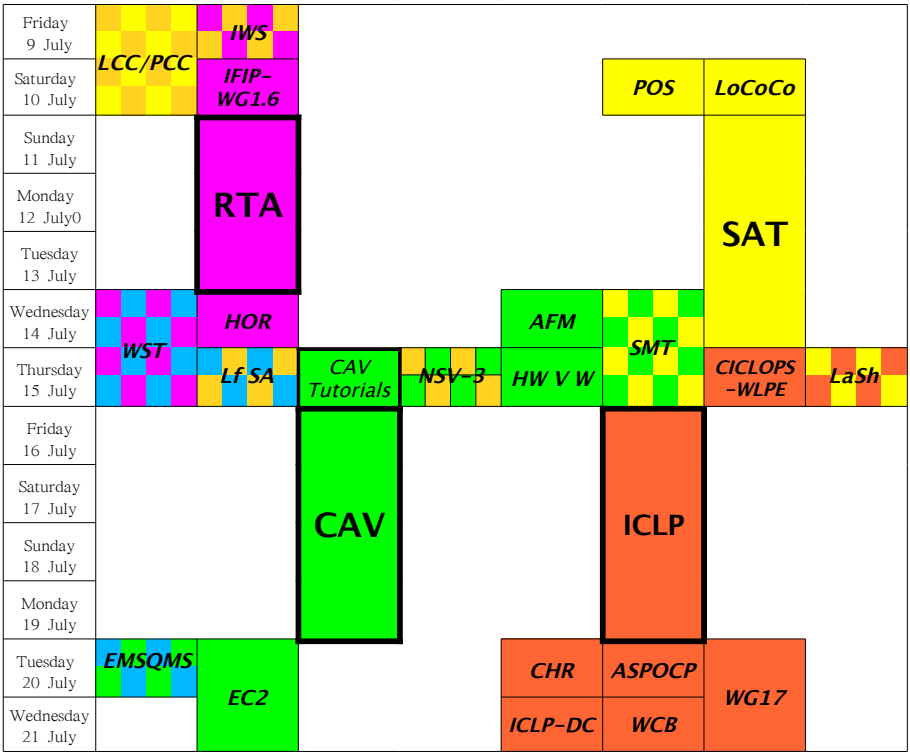
  Block 2
  - CAV – Appleton Tower Lecture Theatre 4 (including tutorials)
  - IJCAR – Appleton Tower Lecture Theatre 5
  - ICLP – Appleton Tower Lecture Theatre 3
  - CSF – Appleton Tower Lecture Theatre 2
- Workshops will be held in either Informatics Forum (IF) or Appleton Tower (AT) whose room numbering is of the form X.YZ, X is the level, YZ is the room number.
  (X=G refers to the ground floor.)

General Schedule



Workshops are marked with the same colour(s) as their associated conference(s).

General Schedule



Workshops are marked with the same colour(s) as their associated conference(s).

SOCIAL EVENTS

Block 1: ITP, LICS, RTA, SAT (11–14 July 2010)

Drinks Reception - Sunday, 11th July at Edinburgh Castle (19:00 – 22:00)

Public areas of the castle will be open including the Crown Room, which displays the Scottish Crown Jewels. The reception coincides with the 2010 FIFA World Cup Final, which will be shown on the plasma screens during the reception. Additional food and drink will be available for purchase.

Conference Banquet - Tuesday, 13th July at Our Dynamic Earth (19:00 for 20:00)

One of Edinburgh's most popular tourist attractions, by the foot of the Royal Mile. The displays will be open for viewing.

Block 2: CAV, CSF, ICLP, IJCAR (16–19 July 2010)

Drinks Reception - Friday, 16th July at The National Galleries of Scotland (18:30 – 20:30)

The Galleries lie at the heart of Edinburgh's main thoroughfare, Princes Street, beneath the Castle. The National Gallery houses Scotland's national collection of fine art from the early Renaissance to the end of the nineteenth century and will be open for viewing during the reception.

Conference Banquet - Sunday, 18th July at Prestonfield House (19:30 for 20:00)

Nestling at the foot of Arthur's Seat close to the main university and FLoC accommodation campus.

Squash Tournament - Sunday, 15th July

The traditional CADE/IJCAR Squash Tournament will be held on 15 July. Any FLoC participant may sign up during registration for £8.

Plenary and Keynote Invited Talks

All these talks will be held in the George Square Lecture Theatre and are freely open to members of the public.

Sunday, July 11th

14:00 –14:30 (Plenary)
Amir Pnueli: A Gentle Giant, Lord of the Phi's and the Psi's
David Harel (Weizmann Institute of Science)

14:30 – 15:00 (Plenary)
Robin Milner, a Craftman of Tools for the Mind
Gordon Plotkin (University of Edinburgh)

Tuesday, July 13th

09:00 – 10:00 (Plenary)
Datalog+ : A Family of Logical Query Languages for New Applications
Georg Gottlob (University of Oxford)

14:00 – 15:00 (Keynote)
Theorem Proving for Verification: The Early Days
J. Strother Moore (University of Texas)

Friday, July 16th

09:00 – 10:00 (Plenary)
Policy Monitoring in First-order Temporal Logic
David Basin (ETH Zurich)

Sunday, July 18th

14:00 – 15:00 (Keynote)
Induction, Invariants, and Abstraction
Deepak Kapur (University of New Mexico)

Abstracts and short Biographies of the Speakers

David Basin (ETH Zurich)

Friday July 16th, 9:00 – 10:00 - George Square Lecture Theatre.

Policy Monitoring in First-order Temporal Logic.

In security and compliance, it is often necessary to ensure that agents and systems comply to complex policies. An example from financial reporting is the requirement that every transaction **t** of a customer **c**, who has within the last 30 days been involved in a suspicious transaction **t'**, must be reported as suspicious within 2 days. We present an approach to monitoring such policies formulated in an expressive fragment of metric first-order temporal logic. We also report on case studies in security and compliance monitoring and use these to evaluate both the suitability of this fragment for expressing complex, realistic policies and the efficiency of our monitoring algorithm.
(Joint work with Felix Klaedtke and Samuel Mueller)

Biography

David Basin has the chair for Information Security at the Department of Computer Science, ETH Zurich, since 2003. He is also the director of the ZISC, the Zurich Information Security Center.
He received his Ph.D. from Cornell University in 1989, and his Habilitation from the University of Saarbruecken in 1996. His appointments include a postdoctoral research position at the University of Edinburgh (1990-1991), and a senior research position within the Max-Planck-Institut fuer Informatik (1992-1997). From 1997-2002 he was a full professor at the University of Freiburg, where he held the chair for software engineering.
His research focuses on information security, in particular methods and tools for modeling, building, and validating secure and reliable systems. He serves on the editorial boards of numerous journals including IEEE Transactions on Dependable and Secure Computing and Acta Informatica. He is also Editor-in-Chief of Springer-Verlag's book series in Information Security and Cryptography.

Georg Gottlob (University of Oxford)

Tuesday July 13th, 9:00 – 10:00 - George Square Lecture Theatre.

Datalog+-: A Family of Logical Query Languages for New Applications.

I will report on a recently introduced family of Datalog-based languages, called Datalog+-, which is a new framework for tractable ontology querying, and for a variety of other applications. Datalog+- extends plain Datalog by features such as existentially quantified rule heads, and, at the same

time, restricts the rule bodies so to achieve decidability and tractability. I will review a number of theoretical results and show how Datalog+- relates to both Database Dependency Theory and the Guarded Fragment of first order logic. I will show that popular tractable description logics translate into Datalog+- and illustrate how this formalism can be used in the context of web data extraction, data exchange, and other applications.

Biography

Georg Gottlob is a Professor of Computing Science at Oxford University and an Adjunct Professor at TU Wien. His interests include data extraction, database theory, graph decomposition techniques, AI, knowledge representation, logic and complexity. Gottlob has received the Wittgenstein Award from the Austrian National Science Fund, is an ACM Fellow, an ECCAI Fellow, and a member of the Austrian Academy of Sciences, the German National Academy of Sciences, and the Academia Europaea. He chaired the Program Committees of IJCAI 2003 and ACM PODS 2000, was the Editor in Chief of the Journal Artificial Intelligence Communications, and is currently a member of the editorial boards of journals, such as CACM and JCSS. He is the main founder of Lixto, a company that provides tools and services for web data extraction.

David Harel (Weizmann Institute of Science)

Sunday July 11th, 14:00 – 14:30 - George Square Lecture Theatre.

Amir Pnueli: A Gentle Giant, Lord of the Phi's and the Psi's.

Biography

David Harel has been at the Weizmann Institute of Science in Israel since 1980. He was Department Head from 1989 to 1995, and was Dean of the Faculty of Mathematics and Computer Science between 1998 and 2004. He was also co-founder of I-Logix, Inc. He received his PhD from MIT in 1978, and has spent time at IBM Yorktown Heights, and sabbaticals at Carnegie-Mellon, Cornell, and the University of Edinburgh. In the past he worked mainly in theoretical computer science (logic, computability, automata, database theory), and he now works mainly on software and systems engineering and on modeling biological systems. He is the inventor of statecharts and co-inventor of live sequence charts, and co-designed Statemate, Rhapsody and the Play-Engine. Among his awards are the ACM Karlstrom Outstanding Educator Award (1992), the Israel Prize (2004), the ACM Software System Award (2007), and three honorary degrees. He is a Fellow of the ACM, the IEEE and the AAAS, and was elected to the Academia Europaea.

Deepak Kapur (University of New Mexico)

Sunday July 18th, 14:00 – 15:00 - George Square Lecture Theatre.

Induction, Invariants, and Abstraction.

Invariants play a key role in verifying properties of imperative programs. Inductive reasoning is essential to verifying properties of recursive programs. Relationship between derivation of loop invariants and speculation of lemmas in inductive reasoning is explored. Abstraction is an effective heuristic for approximating program behavior in order to derive invariants. Interaction among developing abstractions, inductive reasoning, and generating invariants is investigated.

Biography

Deepak Kapur is a distinguished professor of computer science at the University of New Mexico at Albuquerque. From 1998 until 2006, he served as the chair of the computer science department there. He has conducted research in areas of automated deduction, induction theorem proving, term rewriting, unification theory, formal methods, algebraic and geometric reasoning and their applications. His group built one of the first rewrite-based theorem provers, called Rewrite Rule Laboratory. He served as the editor-in-chief of the Journal of Automated Reasoning from 1993-2007. He is on the editorial board of Journal of Symbolic Computation and other journals. He received the Herbrand Award for distinguished contributions to automated reasoning in 2009.

J. Strother Moore (University of Texas)

Tuesday July 13th, 14:00 – 15:00 - George Square Lecture Theatre.

Theorem Proving for Verification: The Early Days.

Since Turing, computer scientists have understood that the question "does this program satisfy its specifications?" could be reduced to the question "are these formulas theorems?" But the theorem proving technology of the 50s and 60s was inadequate for the task. In 1971, here in Edinburgh, Boyer and I started building the first general-purpose theorem prover designed for a computational logic. This project continues today, with Matt Kaufmann as a partner; the current version of the theorem prover is ACL2 (A Computational Logic for Applicative Common Lisp).

In this talk I'll give a highly personal view of the four decade long "Boyer-Moore Project", including our mechanization of inductive proof, support for recursive definitions, rewriting with previously proved lemmas, integration of decision procedures, efficient representation of logical constants, fast execution, and other proof techniques. Along the way we'll see several interesting side roads: the founding of the Edinburgh school of logic programming, a structure-shared text editor that played a role in the creation of Word, and perhaps most surprisingly, the use of our "Lisp theorem prover" to formalize and prove theorems about commercial microprocessors and virtual machines

via deep embeddings, including parts of processors by AMD, Centaur, IBM, Motorola, Rockwell-Collins, Sun, and others. The entire project helps shed light on the dichotomy between general-purpose theorem provers and special-purpose analysis tools.

Biography

J Strother Moore holds the Admiral B.R. Inman Centennial Chair in Computing Theory at the University of Texas at Austin. He is the author of many books and papers on automated theorem proving and mechanical verification of computing systems. Along with Boyer he is a co-author of the Boyer-Moore theorem prover and the Boyer-Moore fast string searching algorithm. With Matt Kaufmann he is the co-author of the ACL2 theorem prover. Moore got his PhD from the University of Edinburgh in 1973 and his SB from MIT in 1970. Moore was a founder of Computational Logic, Inc., and served as its chief scientist for ten years. He served as chair of the UT Austin CS department for eight years. He and Bob Boyer were awarded the McCarthy Prize in 1983 and the Current Prize in Automatic Theorem Proving by the American Mathematical Society in 1991. In 1999, they were awarded the Herbrand Award for their work in automatic theorem proving. Boyer, Moore, and Kaufmann were awarded the 2005 ACM Software Systems Award for the Boyer-Moore theorem prover. Moore is a Fellow of both the American Association for Artificial Intelligence and the ACM and is a member of the US National Academy of Engineering.

Gordon Plotkin (University of Edinburgh)

Sunday July 11th, 14:30 – 15:00 - George Square Lecture Theatre.

Robin Milner, a Craftsman of Tools for the Mind.

Biography

Gordon Plotkin obtained his BSc, in Mathematics and Physics, from Glasgow University, in 1967, and his PhD, in Artificial Intelligence, from Edinburgh University, in 1972. He then joined the faculty at Edinburgh, becoming a full professor in 1986. He is a Fellow of the Royal Society, a member of Academia Europaea, and a Fellow of the Royal Society of Edinburgh, and has held visiting positions at Syracuse, Stanford, Orsay, INRIA, Aarhus, MIT, ENS, Paris 7, DEC SRC, ETL, and Microsoft.

His research contributions include work on hypothesis discovery, theorem proving, situation theory, non-standard logics, and category theory, but he may be best known for his work on the semantics and logic of programming languages, with contributions to operational semantics, logical frameworks, concurrency, domain theory, security, type theory, lambda calculus, full abstraction, abstract syntax, nondeterminism and probabilistic computation. His current interests include the theory of algebraic computational effects and computational systems biology.

On Internet Access

If you wish to use any of the options described here for accessing the internet, you are required at the registration to sign a document agreeing to the University of Edinburgh's Computing Regulations. These can be viewed at:

http://www.ucs.ed.ac.uk/EUCS/regs.html

1. **Wifi**

   The University of Edinburgh participates in the eduroam secure, world-wide roaming access service. See http://www.eduroam.org/. You can use this if your home institution also participates. If this is the case, you have to register to use eduroam at your home institution, before you arrive. Then, when you arrive, you will automatically have wireless access. FLoC encourages you to use this service.

   Alternatively, information for guest access to the University of Edinburgh's “central” wireless network can be obtained from the Registration Desk.

2. **Computer terminals**

   A limited number of terminals are available on the Appleton Tower concourse. A Visitor Account, obtainable from the Registration Desk, is necessary for access to these terminals. Further terminals are avaiable in the North Computing Lab on the 5th floor of Appleton Tower. These are open access – no account is needed. All terminals have web browsers and ssh clients.

About FLoC (Federated Logic Conference)

During the past forty years there has been extensive, continuous, and growing interaction between logic and computer science. In many respects, logic provides computer science with both a unifying foundational framework and a tool for modelling. In fact, logic has been called "the calculus of computer science," playing a crucial role in diverse areas such as artificial intelligence, computational complexity, distributed computing, database systems, hardware design, programming languages, and software engineering.

The **Federated Logic Conference** brings together several international conferences related to mathematical logic and computer science.

History

In 1996, as part of its Special Year on Logic and Algorithms, DIMACS (Center for Discrete Mathematics and Theoretical Computer Science) hosted the first Federated Logic Conference (FLoC 1996), which brought together four synergistic conferences:

- 13th International Conference on Automated Deduction (CADE),
- 8th International Conference on Computer Aided Verification (CAV),
- 11th IEEE Symposium on Logic in Computer Science (LICS),
- 7th International Conference on Rewriting Techniques and Applications (RTA).

The 1999 Federated Logic Conference (FLoC 1999) was held in Trento, Italy. In addition to 16th CADE, 11th CAV, 14th LICS and 10th RTA, it comprised 15 affiliated workshops.

The 2002 Federated Logic Conference (FLoC 2002) took place in Copenhagen, Denmark. It merged 18th CADE, 14th CAV, 17th LICS and 13th RTA with:

- 11th International Symposium of Formal Methods Europe (FM),
- 18th International Conference on Logic Programming (ICLP),
- 11th International Conference on Automated Reasoning with Analytic Tableaux and Related Methods (TABLEAUX)

and with 31 affiliated workshops.

The 2006 Federated Logic Conference (FLoC 2006) was held in Seattle, USA. In addition to 18th CAV, 21st LICS, 17th RTA and 22nd ICLP, it combined:

- 3rd International Joint Conference on Automated Reasoning (IJCAR), itself is a merger of CADE, TABLEAUX and other meetings,
- 9th International Conference on Theory and Applications of Satisfiability Testing (SAT)

with 41 affiliated workshops.

FLoC 2010

This year will be the biggest Federated Logic Conference with over 1000 people registered. It combines 8 conferences with 48 workshops, and is divided into two blocks:

- Block 1: ITP, LICS, RTA, SAT (11–14 July 2010)
- Block 2: CAV, CSF, ICLP, IJCAR (16–19 July 2010)

In addition to those, there are four independent events affiliated with FloC:

- *Automatheo* – Workshop on Automated Mathematical Theory Exploration (14-15 July 2010)
- *CASC-J5* – The CADE ATP System Competition (16-19 July 2010)
- *SMT-COMP* – Satisfiability Modulo Theories Competition (15-19 July 2010)
- *Termination* (International Termination Competition (during IJCAR)

Committees for FLoC 2010

Steering Committee:

General Chair:	Moshe Y. Vardi
Conference Co-chairs:	Leonid Libkin, Gordon Plotkin
CAV Representative:	Edmund Clarke
CSF Representative:	Graham Steele
ICLP Representative:	Manuel Hermenegildo
IJCAR Representative:	Alan Bundy
ITP Representative:	Tobias Nipkow
LICS Representative:	Martin Abadi
RTA Representative:	Jurgen Giesl
SAT Representative:	Enrico Giunchiglia
EasyChair Representative:	Andrei Voronkov

Program Committee Chairs:

for CAV:	Tayssir Touili, Byron Cook
for CSF:	Michael Backes, Andrew C. Myers
for ICLP:	Manuel Hermenegildo, Torsten Schaub
for IJCAR:	Jurgen Giesl, Reiner Haehnle
for ITP:	Matt Kaufmann, Lawrence C. Paulson
for LICS:	Jean-Pierre Jouannaud
for RTA:	Chris Lynch
for SAT:	Ofer Strichman, Stefan Szeider

Organzing Committee:

Conference Co-chairs:	Leonid Libkin, Gordon Plotkin
for the Steering Committee:	Moshe Y. Vardi
Workshop Chair:	Philip Scott
Publicity Chair:	Nicole Schweikardt
Book exhibit chair:	Stephan Kreutzer
Student Travel Grant Coordinator:	Seth Fogarty

Local Organzing Committee:

Venue Coordinator:	Floris Geerts
Volunteer Coordinator:	Kousha Etessami
Fundraising Coordinator:	Anuj Dawar
Web site:	Claire David, Bartek Klin, Perdita Stevens
Registration Coordinator:	Ian Stark
AV/WiFi Coordinator:	Paul Jackson
Book exhibits:	Stephan Kreutzer
Proceedings Coordinator:	Jacques Fleuriot
Conference Brochure:	Tony Tan

Below are the complete lists of conferences, together with their affiliated workshops.

1. CAV – Computer Aided Verification

- AFM – Automated Formal Methods
- EC2 – Exploiting Concurrency Efficiently and Correctly
- EMSQMS – Evaluation Methods for Solvers and Quality Metrics for Solutions (with IJCAR)
- HW V W – HardWare Verification Workshop
- NSV-3 – Numerical Software Verification (with LICS)
- PSY – Practical SYnthesis for Concurrent Systems (combined with SVARM)
- SMT – Satisfiability Modulo Theories (with SAT)
- SVARM – Synthesis, Verification and Analysis of Rich Models (with IJCAR)

2. CSF – Computer Security Foundations

- ASA-4 – Analysis of Security APIs
- FCC – Formal and Computational Cryptography
- FCS-PrivMod – Foundations of Security and Privacy *(with LICS)*

3. ICLP – International Conference on Logic Programming

- ASPOCP – Answer Set Programming and Other Computing Paradigms
- CHR – Constraint Handling Rules
- CICLOPS – Colloquia on the Implementation of Constraint Logic Programming Systems (combined with WLPE)
- WLPE – Workshop on Logic Programming Environments (combined with CICLOPS)
- ICLP-DC – ICLP Doctoral Consortium
- LaSh – Logic and Search *(with SAT)*
- WCB – Workshop on Constraint Based Method for Bioinformatics
- WG17 – ICLP's WG17 meeting

4. IJCAR – International Joint Conference on Automated Reasoning

- Automatheo – Automated Mathematical Theory Exploration (independent workshop affiliated to FLoC) (with ITP)
- CLoDeM – Comparing Logical Decision Methods (with LICS)
- EMSQMS – Evaluation Methods for Solvers and Quality Metrics for Solutions (with CAV)
- LfSA – Logics for System Analysis (with LICS)
- MLPA – Modulo Systems and Libraries for Proof Assistants (with ITP)
- PAAR – Practical Aspects for Automated Reasoning
- SVARM – Synthesis, Verification and Analysis of Rich Models (with CAV)
- UITP – User Interfaces for Theorem Provers (with ITP)
- UniDL – Uncertainty in Description Logics
- UNIF – Workshop on Unification (with RTA)
- VERIFY – Verification Workshop
- WING – Workshop on Invariant Generation
- WST – Workshop on Termination (with RTA)
- CASC-J5 and Termination – Competitions

5. ITP – Interactive Theorem Proving

- Automatheo – Automated Mathematical Theory Exploration (independent workshop affiliated to FLoC) (with IJCAR)
- Coq-2 – Workshop of Coq users, developers and contributors
- MLPA – Module Systems and Libraries for Proof Assistants (with IJCAR)
- PAR – Partiality and Recursion in Interactive Theorem Provers
- UITP – User Interfaces for Theorem Provers (with IJCAR)

6. LICS – Logic in Computer Science

- CLoDeM – Comparing Logical Decision Methods (with IJCAR)
- DCM – Developments in Computational Models
- DTP – Dependently Typed Programming
- FCS-PrivMod – Foundations of Security and Privacy (with CSF)
- HyLo – Hybrid Logic and Application
- ITRS – Intersection Types and Related Systems
- IWS – Strategies in Rewriting, Proving and Programming (with RTA)
- LAM – Logics, Agents and Mobility
- LCC/PPC – Logic and Computational Complexity/Propositional Proof Complexity (with SAT)
- LFMTP – Logical Frameworks and Meta-languages
- LfSA – Logics for System Analysis (with IJCAR)
- LOLA – Syntax and Semantics of Low Level Languages
- LSB – Logic and Systems Biology
- MLQA – Models and Logics for Quantitative Analysis
- NSV-3 – Numerical Software Verification (with CAV)
- PCARC – Partial Combinatory Algebras in Realizability and Computability
- PSPL – Proof Systems for Program Logics
- PSTT – Proof Search in Type Theories

7. RTA – Rewriting Techniques and Applications

- HOR – Higher-Order Rewriting
- IFIP-WG1.6 – Annual Meeting of the IFIP Working Group 1.6 on Term Rewriting
- IWS – Strategies in Rewriting, Proving and Programming (with LICS)
- UNIF – Workshop on Unification (with IJCAR)
- WST – Workshop on Termination (with IJCAR)

8. SAT – Theory and Applications of Satisfiability Testing

- LaSh – Logic and Search (with ICLP)
- LCC/PPC – Logic and Computational Complexity/Propositional Proof Complexity (with LICS)
- LoCoCo – Logics for Component Configuration
- POS – Pragmatics of SAT
- SMT – Satisfiability Modulo Theories (with CAV)

Friday, 9 July 2010

Workshops + Milner Lecture by Stephen Cook

	Type	Event	Place
1	Workshop	Coq-2 – ITP	Appleton Tower 2.14
2	Workshop	MLQA – LICS	Forum G.03
3	Workshop	ITRS – LICS	Appleton Tower 2.11
4	Workshop	DCM – LICS/IJCAR	Appleton Tower 2.12
5	Workshop	LOLA – LICS	Forum 4.31+4.33
6	Workshop	DTP – LICS	Forum G.07
7	Workshop	PCARC – LICS	Forum 1.15
8	Workshop	IWS – LICS/RTA	Forum 1.16
9	Workshop	LCC+PCC – SAT	Forum G.07A
10	Lecture	Milner Lecture: Stephen Cook (NOT FLoC event), at 1700	Appleton Tower Lecture Theatre 5
11	Reception	Milner Lecture Reception (NOT FLoC event), at 1800	Forum

Saturday, 10 July 2010

Workshops

	Type	Event	Place
1	Workshop	HyLo – LICS	Appleton Tower 2.11
2	Workshop	DCM – LICS/IJCAR	Appleton Tower 2.12
3	Workshop	LCC+PCC – LICS	Forum G.07A
4	Workshop	DTP – LICS	Forum G.07
5	Workshop	LSB – LICS	Forum 4.31+4.33
6	Workshop	PSPL – LICS	Appleton Tower 2.14
7	Workshop	IFIP-WG1.6 – RTA	Forum 1.15
8	Workshop	POS – SAT	Forum G.03
9	Workshop	LoCoCo – SAT	Forum 1.16

Sunday, 11 July 2010

ITP	LICS	RTA	SAT
Appleton Tower Lecture Theatre 5	Appleton Tower Lecture Theatre 4	Appleton Tower Lecture Theatre 3	Appleton Tower Lecture Theatre 2
	0845 – 0900 Opening		
Session 1 Chair: Matt Kaufmann	Finite Model Theory Chair: Victor Vianu	Session 1 Chair: Georg Moser	SAT Invited Talk
0900 – 0930 N. Schirmer, E. Cohen From Total Store Order to Sequential Consistency: A Practical Reduction Theorem	0900 – 0930 V. Barany, G. Gottlob, M. Otto Querying the Guarded Fragment	0900 – 0930 P. Bahr Partial Order Infinitary Term Rewriting and Bohm Trees	0900 – 1000 Yehuda Naveh The Big Deal: Applying Constraint Satisfaction Technologies Where It Makes the Difference
0930 – 1000 F. Verbeek, J. Schmaltz Proof Pearl: A formal proof of Duato's condition for deadlock-free adaptive networks	0930 – 1000 M. Otto Highly Acyclic Groups, Hypergraph Covers and the Guarded Fragment	0930 – 1000 H. Zantema, M. Raffelsieper Proving Productivity in Infinite Data Structures	
1000 – 1030 Cofee break			
Session 2 Chair: David Pichardie	Type Theory Chair: Herman Geuvers	Session 2 Chair: Johannes Waldmann	Heuristics
1030 – 1100 R. Kumar, M. Norrish (Nominal) Unification by Recursive Descent with Triangular Substitutions	1030 – 1100 V. Siles, H. Herbelin Equality is typable in Semi-Full Pure Type Systems	1030 – 1100 M. Sylvestre, I. Durand, G. Senizergues Termination of linear bounded term rewriting systems	1030 – 1100 S. Kottler SAT Solving with Reference Points
1100 – 1130 J.-F. Dufourd, Y. Bertot Formal study of plane Delaunay Triangulation	1100 – 1130 A. Popescu, E. Gunter, C. Osborn Strong normalization of System F by HOAS on top of FOAS	1100 – 1130 C. Sternagel, R. Thiemann Certified Subterm Criterion and Certified Usable Rules	1100 – 1130 D. Tompkins, H. Hoos Dynamic Scoring Functions with Variable Expressions: New SLS Methods for Solving SAT
1130 – 1200 S. Boldo, F. Clement, J.-C. Filliartre, M. Mayero, G. Melguiond, P. Weis Formal Proof of a Wave Equation Resolution Scheme: the Method Error	1130 – 1200 J. Laird Game Semantics for a Polymorphic Programming Language	1130 – 1200 F. Neurauter, A. Middeldorp Polynomial Interpretations over the Reals do not Subsume Polynomial Interpretations over the Integers	1130 – 1150 A. Nadel, V. Ryvchin Assignment Stack Shrinking
1200 – 1230 A. Fox, M. Myreen A Trustworthy Monadic Formalization of the ARMv7 Instruction Set Architecture	1200 – 1230 H. Herbelin An intuitionistic logic that proves Markov's principle	1200 – 1230 C. Otto, M. Brockschmidt, C. von Essen, J. Giesl Automated Termination Analysis of Java Bytecode by Term Rewriting	1150 – 1210 M. Jarvisalo, A. Biere ReconstructingSolutions after Blocked Clause Elimination
			1210 – 1230 A. Sabharwal, B. Selman, L. Kroc An Empirical Study of Optimal Noise and Runtime Distributions in Local Search
1230 – 1400 Lunch break			

FLoC Plenary Talks: Tributes to Amir Pnueli and Robin Milner (George Square Lecture Theatre) Chair: Moshe Vardi			
1400 – 1430 Amir Pnueli: A Gentle Giant, Lord of the Phi's and the Psi's David Harel			
1430 – 1500 Robin Milner, a Craftsman of Tools for the Mind Gordon Plotkin			
1500 – 1530 Coffee break			
Session 3 Chair: Cesar Munoz	Logic and Automata Chair: David Harel	Session 3 Chair: Dan Dougherty	Theory + Combinatorics
1530 – 1600 B. Huffman, C. Urban Proof Pearl: A New Foundation for Nominal Isabelle	1530 – 1600 M. Jenkins, J. Ouaknine, A. Rabinovich, J. Worrell Alternating Timed Automata over Bounded Time	1530 – 1600 A. Koller, S. Thater Underspecified computation of normal forms	1530 – 1600 K. Makino, S. Tamaki, M. Yamamoto An Exact Algorithm for the Boolean Connectivity Problem for k-CNF
1600 – 1630 J. Cowles, R. Gamboa Using a First Order Logic to Verify That Some Set of Reals Has No Lebesgue Measure	1600 – 1630 T. Colcombet, C. Loeding Regular cost functions over finite trees	1600 – 1630 K. Gmeiner, B. Gramlich, F. Schernhammer On (Un)Soundness of Unravelings	1600 – 1630 H. Katebi, K. Sakallah, I. Markov Symmetry and Satisfiability: An Update
1630 – 1700 T. Mhamdi, O. Hasan, S. Tahar On the Formalization of the Lebesgue Integration Theory in HOL	1630 – 1700 E. Kopczynski, A. Widjaja To Parikh Images of Grammars: Complexity and Applications	1630 – 1700 A. Riesco, A. Verdejo, N. Marti-Oliet Declarative Debugging of Missing Answers for Maude Specifications	1630 – 1700 S. Porschen, T. Schmidt, E. Speckenmeyer Complexity Result for Linear XSAT Problems
	1700 – 1715 Coffee break	1700 – 1720 M. Hills, G. Rosu A Rewriting Logic Semantics Approach to Modular Program Analysis	1700 – 1730 O. Beyersdorff, A. Meier, S. Mueller, M. Thomas, H. Vollmer Proof Complexity of Propositional Default Logic
	Complexity of CSP Chair: Nicole Schweikardt		
	1715 – 1745 M. Bodirsky, M. Hils, B. Martin On the Scope of the Universal-Algebraic Approach to Constraint Satisfaction		
	1745 – 1815 M. Kozik, L. Barto New conditions for Taylor varieties and CSP		
1900 – 2230 Drinks reception at Edinburgh Castle			

Monday, 12 July 2010

ITP	LICS	RTA	SAT
Appleton Tower Lecture Theatre 5	Appleton Tower Lecture Theatre 4	Appleton Tower Lecture Theatre 3	Appleton Tower Lecture Theatre 2
ITP Invited Talk Chair: Sandip Ray	LICS Invited Talk Chair: Rajeev Alur	RTA Invited Talk Chair: Sophie Tison	SAT Invited Talk
0900 – 1000 Gerwin Klein A Formally Verified OS Kernel. Now What?	0900 – 1000 Martin Abadi The Fine Print of Security	0900 – 1000 Mikolaj Bojanczyk Automata for Data Words and Data Trees	0900 – 1000 Ramamohan Paturi Exact Algorithms and Complexity
1000 – 1030 Coffee break			
Session 4 Chair: J Moore	Semantics Chair: Martin Abadi	Session 4 Chair: Delia Kesner	Theory + Combinatorics
1030 – 1100 J. Hendrix, D. Kapur, J. Meseguer Coverset Induction with Partiality and Subsorts: a Powerlist Case Study	1030 – 1100 J. Endrullis, D. Hendriks, J. W. Klop Modular Construction of Fixed Point Combinators and Clocked Boehm Trees	1030 – 1100 A. Guglielmi, T. Gundersen, M. Parigot A proof calculus which reduces syntactic bureaucracy	1030 – 1100 E. Dantsin, A. Wolpert On Moderately Exponential Time for SAT
1100 – 1130 M. Armand, B. Gregoire, A. Spiwack, L. Thery Extending Coq with Imperative Features and its Application to SAT Verification	1100 – 1130 C. Broadbent, A. Carayol, C.-H. L. Ong, O. Serre Recursion Schemes and Logical Reflection	1100 – 1130 C. Appel, V. van Oostrom, J. G. Simonsen Higher-Order (Non-)Modularity	1100 – 1130 E. Ben-Sasson, J. Johannsen Lower bounds for width-restricted clause learning on small width formulas
1130 – 1200 M. Johansson, L. Dixon, A. Bundy Case-Analysis for Rippling and Inductive Proof	1130 – 1200 J. Brotherson and M. Kanovich, D. Larchey-Wendling and D. Galmiche Undecidability of Boolean BI and of propositional separation logic and its neighbours	1130 – 1200 K. Fujita, A. Schubert The undecidability of type related problems in type-free style System F	1130 – 1150 S. Cotton Some Techniques for Minimizing Resolution Proofs
1200 – 1230 P. Manolios, D. Vroon Interactive Termination Proofs using Termination Cores	1200 – 1230 P.-A. Mellies Segal condition meets computational effects	1200 – 1230 M. Schmidt-Schauss, D. Sabel, E. Machkasova Simulation in the Call-by-Need Lambda-Calculus with letrec	1150 – 1210 A. van Gelder, I. Spence Zero-One Designs Produce Small Hard SAT Instances
			1210 – 1230 W. Matthews, R. Paturi Uniquely Satisfiable k-SAT Instances with Almost Minimal Occurences of Each Variable
1230 – 1400 Lunch break			
Session 5 Chair: Gerwin Klein	Finite Model Theory Chair: Stephan Kreutzer	RTA Invited Talk Chair: Fairouz Kamareddine	SAT Usage
1400 – 1430 G. Barthe, B. Gregoire, S. Z. Beguelin Programming language techniques for cryptographic proofs	1400 – 1430 D. Kuske, J. Liu, M. Lohrey The Isomorphism Problem On Classes of Automatic Structures	1400 – 1500 Vincent van Oostrom Realising Optimal Sharing	1400 – 1430 C. Fuhs, P. Schneider-Kamp Synthesizing Shortest Straight-Line Programs over GF(2) using SAT

1430 – 1500 D. Cachera, D. Pichardie Proof Pearl: A Certified Denotational Abstract Interpreter	1430 – 1500 Y. He On the strictness of the first-order quantifier structure hierarchy over finite structures		1430 – 1500 O. Kullmann Green-Tao Numbers and SAT
1500 – 1530 Coffee break			
Session 6 Chair: Pete Manolios	Finite Model Theory Chair: Yijia Chen	Session 5 Chair: Bernhard Gramlich	QBF
1530 – 1600 S. Swords, W. Hunt A Mechanically Verified AIG-to-BDD Conversion Algorithm	1530 – 1600 M. Grohe Fixed-Point Definability and Polynomial Time on Graphs with Excluded Minors	1530 – 1600 T. Kutsia, M. Marin Order-Sorted Unification with Regular Expression Sorts	1530 – 1600 U. Bubeck, H. K. Buning Rewriting (Dependency-)Quantified 2-CNF with Arbitrary Free Literals into Existential 2-HORN
1600 – 1630 W. Mansky, E. Gunter A Framework for Formal Verification of Compiler Optimizations	1600 – 1630 S. Kreutzer, S. Tazari Lower Bounds for the Complexity of Monadic Second-Order Logic	1600 – 1630 S. Mimram Computing Critical Pairs in 2-Dimensional Rewriting Systems	1600 – 1630 C. Miller, S. Kupferschmid, M. Lewis, B. Becker Encoding Techniques, Craig Interpolants and Bounded Model Checking for Incomplete Designs
1630 – 1700 H. Geuvers, A. Koprowski, D. Synek, E. van der Weegen Automated Machine-Checked Hybrid System Safety Proofs	1630 – 1700 B. Laubner Capturing Polynomial Time on Interval Graphs	1630 – 1700 J. Levy, M. Villaret An Efficient Nominal Unification Algorithm	1630 – 1700 E. Giunchiglia, P. Marin, M. Narizzano sQueezeBF: An effective preprocessor for QBFs
1700 – 1800 Business Meeting Chair: Matt Kaufmann and Larry Paulson	1700 – 1715 Coffee break		1700 – 1730 A. Goultiaeva, F. Bacchus Exploiting Circuit Representations in QBF solving
	Logics Chair: Dan Ghica	Session 6	
	1715 – 1745 P. Johann, A. Simpson, J. Voigtlander A Generic Operational Metatheory for Algebraic Effects	1715 – 1815 RTA Business Meeting	
	1745 – 1815 N. Zeilberger Polarity and the logic of delimited contiuations		
	1830 – 2000 LICS Business Meeting LICS 25th Year Anniversary (A Look at the Past LICS Meetings and a Panel on the Future of LICS)		

Tuesday, 13 July 2010

ITP	LICS	RTA	SAT
Appleton Tower Lecture Theatre 5	Appleton Tower Lecture Theatre 4	Appleton Tower Lecture Theatre 3	Appleton Tower Lecture Theatre 2
FLoC Plenary Talk (George Square Lecture Theatre) Chair: Martin Grohe			
0900 – 1000 Georg Gottlob Datalog+/-: A Family of Logical Knowledge Representation and Query Languages for New Applications			
1000 – 1030 Coffee break			
Session 7 Chair: Michael Norrish	Logic and Automata Chair: Georg Gottlob	Session 7 Chair: Rachid Echahed	Random + Statistics/LS
1030 – 1100 A. Felty, B. Pientka Reasoning with Higher-Order Abstract Syntax and Contexts: A Comparison	1030 – 1100 M. Bojanczyk, S. Lasota An extension of data automata that captures XPath	1030 – 1100 J. Endrullis, C. Grabmayer, D. Hendriks, J. W. Klop, V. van Oostrom Unique Normal Forms in Infinitary Weakly Orthogonal Term Rewriting	1030 – 1100 V. Rathi, E. Aurell, L. Rasmussen, M. Skoglund Bounds on Threshold of Regular Random k-SAT
1100 – 1130 S. Autexier, D. Dietrich A tactic language for declarative proofs	1100 – 1130 T. Place, L. Segoufin Deciding definability in FO2(<) on trees	1100 – 1130 P. Bahr Abstract Models of Transfinite Reductions	1100 – 1130 T. Hugel, Y. Boufkhad Non Uniform Selection of Solutions for Upper Bounding the 3-SAT Threshold
1130 – 1200 D. Walukiewicz-Chrzaszcz, J. Chrzaszcz Inductive Consequences in the Calculus of Constructions	1130 – 1200 L. Barguno, C. Creus, G. Godoy, F. Jacquemard, C. Vacher The Emptiness Problem for Tree Automata with Global Constraints	1130 – 1200 S. Kahrs Infinitary Rewriting: Foundations Revisited	1130 – 1150 M. Nikolic Statistical Methodology for Comparison of SAT Solvers
1200 – 1210 M. O. Myreen Separation logic adapted for proofs by rewriting			1150 – 1210 A. Balint, A. Frohlich Improving stochastic local search for SAT with instance specific information and a new probability distribution
1210 – 1220 D. Howe Higher-Order Abstract Syntax in Isabelle/HOL	1200 – 1230 N. Schweikardt, L. Segoufin Addition-invariant FO and regularity	1200 – 1230 J. G. Simonsen Weak Convergence and Uniform Normalization in Infinitary Rewriting	1210 – 1230 A. Belov, Z. Stachniak Improved Local Search for Circuit Satisfiability
1220 – 1230 B. Spitters, E. van der Weegen Developing the algebraic hierarchy with type classes in Coq			
1230 – 1400 Lunch break			
FLoC Keynote Talk (George Square Lecture Theatre) Chair: Jean-Pierre Jouannaud			
1400 – 1500 J. Strother Moore Theorem Proving for Verification: The Early Days			

1500 – 1530 Coffee break			
Excursion 1530 – 1800	Logics Chair: Amy Felty	Session 8 Chair: Femke van Raamsdonk	QBF
	1530 – 1600 A. Guglielmi, T. Gundersen, L. Strassburger Breaking Paths in Atomic Flows for Classical Logic	1530 – 1600 H. Zankl, M. Korp Modular Complexity Analysis via Relative Complexity	1530 – 1600 R. Brummayer, F. Lonsing, A. Biere Automated Testing and Debugging of SAT and QBF Solvers
	1600 – 1630 M. Basaldella, K. Terui Infinitary completeness in ludics	1600 – 1630 M. Avanzini, G. Moser Closing the Gap Between Runtime Complexity and Polytime Computability	1600 – 1630 W. Klieber, S. Sapra, S. Gao, E. Clarke A Non-Prenex, Non-Clausal QBF Solver with Game-State Learning
	1630 – 1700 A. Avron, O. Arieli, A. Zamansky On Strong Maximality of Paraconsistent Finite-Valued Logics	1630 – 1700 J. Waldmann Polynomially Bounded Matrix Interpretations	1630 – 1700 F. Lonsing, A. Biere Integrating Dependency Schemes in Search-Based QBF Solvers
	1700 – 1715 Coffee break	1700 – 1720 S. Winkler, H. Sato, A. Middeldorp, M. Kurihara Optimizing mkbTT (System Description)	1700 – 1800 SAT Business Meeting
	Short Papers Session Chair: Stephane Lengrand		
	1715 – 1725 M. N. Menaa On the Compositionality of Round Abstraction		
	1725 – 1735 P.-Y. Strub, Q. Wang Coq Modulo Theory – Short Paper		
	1735 – 1745 S. Bohm, S. Goller, P. Jancar Bisimilarity of one-counter processes is PSPACE-complete		
	1745 – 1755 J.-Q. Li A Computability Path Ordering for Polymorphic Terms		
	1830 – 2359 Banquet		

Wednesday, 14 July 2010

ITP	LICS	SAT
Appleton Tower Lecture Theatre 5	Appleton Tower Lecture Theatre 4	Appleton Tower Lecture Theatre 2
ITP Invited Talk Chair: Christian Urban	LICS Invited Talk Chair: Martin Escardo	SAT Invited Tutorial
0900 – 1000 Benjamin C. Pierce Proof Assistants as Teaching Assistants: A View from the Trenches	0900 – 1000 Catuscia Palamidessi Probabilistic Information Flow	0900 – 1000 Daniel Kroening A Primer on the Algorithmic Aspects of Satisfiability Modulo Theories
1000 – 1030 Coffee break		
Session 8 Chair: Thorsten Altenkirch	Process Calculi Chair: Catuscia Palamidessi	Optimization + SAT Usage
1030 – 1100 M. Sozeau Equations: a dependent pattern-matching compiler	1030 – 1100 M. Johansson, J. Bengtson, J. Parrow, B. Victor Weak Equivalences in Psi-calculi	1030 – 1100 V. Manquinho, R. Martins, I. Lynce Improving Unsatisfiability-based Algorithms for Boolean Optimization
1100 – 1130 A. Charguéraud The Optimal Fixed Point Combinator	1100 – 1130 M. Bartoletti, R. Zunino A calculus of contracting processes	1100 – 1130 D. Pankratov, A. Borodin On the Relative Merits of Simple Local Search Methods for the Max Sat Problem
1130 – 1200 T. Braibant, D. Pous An Efficient Coq Tactic for Deciding Kleene Algebras	1130 – 1200 C. Eisentraut, H. Hermanns, L. Zhang On Probabilistic Automata in Continuous Time	1130 – 1150 C.-M. Li, F. Manya, Z. Quan, Z. Zhu Exact MinSAT Solving
1200 – 1230 P. Lammich, A. Lochbihler The Isabelle Collections Framework	1200 – 1230 J. Goubault-Larrecq Omega-QRB-Domains and the Probabilistic Powerdomain	1150 – 1210 R. Ehlers Minimising Deterministic Buchi Automata Precisely using SAT Solving
		1210 – 1230 G. Namasivayam, M. Truszczynski Simple but Hard Mixed Horn Formulas
1230 – 1400 Lunch break		
Session 9 Chair: to be determined	LICS Invited Talk Chair: Eugenio Moggi	Joint SAT/SMT session
1400 – 1430 J. C. Blanchette, T. Nipkow Nitpick: A Counterexample Generator for Higher-Order Logic Based on a Relational Model Finder	1400 – 1500 Vincent Danos Abstracting the ODE semantics of rule-based models: exact and automatic model reduction	1400 – 1420 M. Bofill, J. Suy, M. Villaret A system for solving constraint satisfaction problems with SMT

1430 – 1500 A. Krauss, A. Schropp A Mechanized Translation from Higher-Order Logic to Set Theory		1420 – 1450 J. Christ, J. Hoenicke (SMT'10) Instantiation-Based Interpolation for Quantified Formulae
1500 – 1530 Coffee break		
Session 10 Chair: Elsa Gunter	Concurrency Chair: Vincent Danos	Competitions
1530 – 1600 C. Keller, B. Werner Importing HOL-Light into Coq	1530 – 1600 C. Laneve, A. Vitale The Expressive Power of Synchronizations	1530 – 1600 C. Peschiera, L. Pulina, A. Tacchella, U. Bubeck, O. Kullmann, I. Lynce The Seventh QBF Solvers Evaluation (QBFEVAL'10)
1600 – 1630 S. Bohme, T. Weber Fast LCF-Style Proof Reconstruction for Z3	1600 – 1630 S. Staton, G. Winskel On the expressivity of symmetry in even structures	1600 – 1630 Competition
1630 – 1700 T. Weber Validating QBF Invalidity in HOL4	1630 – 1700 T. Ehrhard A finiteness structure on resource terms	1630 – 1700 Competition
	1700 – 1715 Coffee break	1700 – 1730 Competition
	Coalgebras Chair: Phil Scott	
	1715 – 1745 S. Abramsky Coalgebras, Chu spaces and Representations of Physical Systems	
	1745 – 1815 S. Milius A Sound and Complete Calculus for finite Stream Circuits	
	1815 – 1820 Closing	

Wednesday, 14 July 2010

Workshops

	Type	Event	Place
1	Workshop	SMT – CAV/SAT	Forum 4.31+4.33
2	Workshop	FCS–Priv-Mod – LICS/CSF	Appleton Tower Lecture Theatre 1
3	Workshop	PAAR – IJCAR	Appleton Tower 2.14
4	Workshop	LFMTP – LICS	Appleton Tower 2.12
5	Workshop	UNIF – IJCAR/RTA	Appleton Tower Lecture Theatre 3
6	Workshop	WST – IJCAR/RTA	Forum G.03
7	Workshop	HOR – RTA	Forum G.07
8	Workshop	CAV – AFM	Forum G.07A
9	Workshop	Automatheo (Independent workshop)	India St.

Thursday, 15 July 2010

Workshops + CAV Tutorial

	Type	Event	Place
1	Workshop	PAR – ITP	Forum 4.31+4.33
2	Workshop	UITP – IJCAR/ITP	Dugald Stewart Building G.06
3	Workshop	MLPA – ITP/IJCAR	Forum 1.16
4	Workshop	FCS–Priv-Mod – LICS/CSF	Appleton Tower Lecture Theatre 1
5	Workshop	LAM – LICS	Appleton Tower Lecture Theatre 2
6	Workshop	PSTT – LICS	Forum 1.15
7	Workshop	CLoDem – LICS/IJCAR	Appleton Tower 2.14
8	Workshop	LfSA – LICS/IJCAR	Appleton Tower 2.12
9	Workshop	WST – IJCAR/RTA	Forum G.03
10	Workshop	NSV-3 – LICS/CAV	Appleton Tower Lecture Theatre 3
11	Workshop	HW V W – CAV	Appleton Tower 2.11
12	Workshop	CICLOPS-WLPE – ICLP	Forum G.07A
13	Workshop	SMT – CAV/SAT	Forum 4.31+4.33
14	Workshop	LaSh – ICLP/SAT	Appleton Tower Lecture Theatre 5
15	Lunch	IFColog sponsored lunch	Appleton Tower Concourse
16	Lunch	FLoC Steering Committee lunch	Forum Turing Room
15	Workshop	Automatheo (Independent workshop)	India St.

CAV Tutorial: (Appleton Tower Lecture Theatre 4)

Time	
0900 – 1000	Tutorial 1 Robert Brayton ABC: An Academic Industrial-Strength Verification Tool
1000 – 1030	Coffee break
1030 – 1100	Tutorial 1 continued
1100 – 1230	Tutorial 2 Ken McMillan Software Model Checking (TBC)
1230 – 1400	Lunch break
1400 – 1500	Tutorial 3 Thomas Reps There's Plenty of Room at the Bottom: Analyzing and Verifying Machine Code
1500 – 1530	Coffee break
1530 – 1600	Tutorial 3 continued
1600 – 1730	Tutorial 4 Andrey Rybalchenko Constraint Solving for Program Verification: Theory and Practice by Example

Friday, 16 July 2010

IJCAR	CAV	ICLP
Appleton Tower Lecture Theatre 5	Appleton Tower Lecture Theatre 4	Appleton Tower Lecture Theatre 3
FLoC Plenary Talk (George Square Lecture Theatre)		
0900 – 1000 David Basin Policy Monitoring in First-order Temporal Logic		
1000 -1030 Cofee break		
Logical Frameworks and Combination of Systems	Software Model Checking	Analysis and Implementation Chair: Enrico Pontelli
1030 – 1045 Mike Gordon Remembering Robin Milner	1030 – 1055 A. Bouajjani, C. Dragoi, C. Enea, A. Rezine, M. Sighireanu Invariant Synthesis for Programs Manipulating Lists with Unbounded Data	1030 – 1100 P. Schneider-Kamp, J. Giesl, T. Stroeder, A. Serebrenik, R. Thiemann Automated Termination Analysis for Logic Programs with Cut
1045 – 1115 A. Schack-Nielsen, C. Schurmann Curry-Style Explicit Substitutions for the Linear and Affine Lambda Calculus	1055 – 1120 D. Kroening, N. Sharygina, A. Tsitovich, C. M. Wintersteiger Termination Analysis with Compositional Transition Invariants	1100 – 1130 A. Pettorossi, M. Proietti, V. Senni Transformations of Logic Programs on Infinite Lists
1115 – 1130 B. Pientka, J. Dunfield Beluga: A Framework for Programming and Reasoning with Deductive Systems (System Description)	1120 – 1145 K. MacMillan Lazy Annotation for Program Testing and Verification	1130 – 1200 P. C. de Guzman, M. C. Linares, D. S. Warren Swapping Evaluation: A Memory-Scalable Solution for Answer-On-Demand Tabling
1130 – 1145 S. Ghilardi, S. Ranise MCMT: A Model Checker Modulo Theories	1145 – 1200 T. Ball, E. Bounimova, V. Levin, R. Kumar, J. Lichtenberg The Static Driver Verifier Research Platform	
1145 – 1215 C. Ihlemann, V. Sofronie-Stokkermans On efficient reasoning in combinations of theories	1200 – 1215 M. Kawaguchi, P. M. Rondon, R. Jhala Dsolve: Verification Via Liquid Type Inference	1200 – 1230 V. S. Costa, I. C. Dutra, R. Rocha Threads and Or-Parallelism Unified
	1215 – 1230 S. Kundu, M. Ganai, C. Wang CONTESSA: Concurrency Testing Augmented with Symbolic Analysis	
1230 – 1400 Lunch break		
Description Logic I	Model Checking and Automata	Probabilistic Programs Chair: Tom Schrijvers
1400 – 1430 R. Gore, C. Kupke, D. Pattinson, L. Schroder Global Caching for Coalgebraic Description Logics	1400 – 1425 P. A. Abdulla, Y.-F. Chen, L. Clemente, L. Holik, C.-D. Hong, R. Mayr, T. Vojnar Simulation Subsumption in Ramsey-based Buchi Automata Universality and Inclusion Testing	1400 – 1430 J. Sneyers, W. Meert, J. Vennekens, Y. Kameya, T. Sato CHR(PRISM)-based Probabilistic Logic Learning
1430 – 1500 D. Magka, Y. Kazakov, I. Horrocks Tractable Extensions of the Description Logic EL with Numerical	1425 – 1500 F. Herbreteau, B. Srivathsan, I. Walukiewicz Efficient Emptiness Check for Timed	1430 – 1500 H. Christiansen, C. T. Have, O. T. Lassen, M. Petit Inference with Constrained Hidden

Datatypes	Buchi Automata	Markov Models in PRISM
	1500 – 1530 Coffee break	
Higher-Order Logic	Tools	Technical Communications – I Chair: Vitor Santos-Costa
1530 – 1600 J. Backes, C. Brown Analytic Tableaux for Higher-Order Logic with Choice	1530 – 1545 N. Caniart Merit: an Interpolating Model-Checker	1530 – 1542 M. Maher Contractible Approximations of Soft Global Constraints
	1545 – 1600 A. Donze Breach, A Simulation-based Toolbox for the Verification and Parameter Synthesis of Hybrid Systems	1542 – 1554 J. Santos, S. Muggleton Subsumer: A Prolog theta-subsumption engine
1600 – 1630 J. C. Blanchette, A. Krauss Monotonicity Inference for Higher-Order Formulas	1600 – 1615 A. Pnueli, Y. Sa'ar, L. D. Zuck JTLV: A Framework for Developing Verification Algorithms	1554 – 1606 P. Lopez-Garcia, L. Darmawan, F. Bueno A Framework for Verification and Debugging of Resource Usage Properties
		1606 – 1618 N. Guenot Focused Proof Search for Linear Logic in the Calculus of Structures
	1615 – 1630 R. Meyer, T. Strazny Petruchio: From Dynamic Networks to Nets	1618 – 1630 N. Saeedloei, G. Gupta Timed Definite Clause Omega-Grammars
1630 – 1700 S. Bohme, T. Nipkow Sledgehammer: Judgement Day	In Memory of Amir Pnueli	1630 – 1642 T. Mantadelis, G. Janssens Dedicated Tabling for a Probabilistic Setting
	1630 – 1730 Moshe Vardi Amir Pnueli: Ahead of His Time	1642 – 1654 D. Fierens Improving the Efficiency of Gibbs Sampling for Probabilistic Logical Models by Means of Program Specialization
	1730 – 1800 Donor Peled, Zohar Manna, etc. Reminiscences on Amir Pnueli (TBC)	

Saturday, 17 July 2010

CSF	IJCAR	CAV	ICLP
Appleton Tower Lecture Theatre 2	Appleton Tower Lecture Theatre 5	Appleton Tower Lecture Theatre 4	Appleton Tower Lecture Theatre 3
Hewlett-Packard Security Lecture	IJCAR Invited Talk	CAV Invited Talk	ICLP Invited Talk Chair: Torsten Schaub
0900 – 1000 Vitaly Shmatikov The end of anonymity, the beginning of privacy	0900 – 1000 Johan van Benthem Logic between Expressivity and Complexity	0900 – 1000 Pasquale Malacaria Quantitative Information Flow: from Theory to Practice?	0900 – 1000 Francois Fages A Logical Paradigm for Systems Biology
1000 – 1030 Coffee break			
Quantitative Security	Verification	Counter and Hybrid Systems Verification	Answer Set Programming Chair: Stefan Woltran
1030 – 1100 B. Kopf, A. Rybalchenko Approximation and randomization for quantitative information-flow analysis	1030 – 1100 A. Ayad, C. Marche Multi-Prover Verification of Floating-Point Programs	1030 – 1055 F. Mari, I. Melatti, I. Salvo, E. Tronci Synthesis of Quantizied Feedback Control Software for Discrete Time Linear Hybrid Systems	1030 – 1100 C. Drescher, T. Walsh A Translational Approach to Constraint Answer Set Solving
1100 – 1130 H. Yasuoka, T. Terauchi Quantitative information flow – verification hardness and possibilities	1100 – 1115 K. Chaudhuri, D. Doligez, L. Lamport, S. Merz Verifying Safety Properties with the TLA+ Proof System	1055 – 1120 L. Zhang, Z. She, S. Ratschan, H. Hermanns, E. M. Hahn Safety Verification for Probabilistic Hybrid Systems	1100 – 1130 S. Baselice, P. Bonatti Decidable subclasses of finitary programs
1130 – 1200 M. Clarkson, F. Schneider Quantification of integrity	1115 – 1130 R. Piskac, V. Kuncak MUNCH – Automated Reasoner for Sets and Multisets	1120 – 1145 K. Ghorbal, E. Goulbault, P. Sylvie A Logical Product Approach to Zonotope Intersection	1130 – 1200 M. Alviano, W. Faber, N. Leone Disjunctive ASP with Functions: Decidable Queries and Effective Computation
1200 – 1230 B. Kopf, G. Smith Vulnerability bounds and leakage resilience of blinded cryptography under timing attacks	1130 – 1200 E. Sherman, B. J. Garvin, M. B. Dwyer A Slice-based Decision Procedure for Type-based Partial Orders	1145 – 1210 R. Iosif, M. Bozga, F. Konecny Fast Acceleration of Ultimately Periodic Relations	1200 – 1230 J. Oetsch, J. Puehrer, H. Tompits Catching the Ouroboros: On Debugging Non-ground Answer-set Programs
	1200 – 1230 V. Sofronie-Stokkermans Hierarchical reasoning for the verification of parametric systems	1210 – 1235 L. Pulina, A. Tacchella An Abstraction-Refinement Approach to Verification of Artificial Neural Networks	
1230 – 1400 Lunch break			
Security Protocol Verification I	First-Order Logic	Memory Consistency	Technical Communications – II Chair: John Gallagher
1400 – 1430 M. Arnaud, V. Cortier, S. Delaune Modeling and verifying ad hoc routing protocols	1400 – 1415 K. Hoder, L. Kovacs, A. Voronkov Symbol Elimination and Interpolation in Vampire	1400 – 1425 J. Alglave, L. Maranget, S. Sarkar, P. Sewell Fences in Weak Memory Models	1400 – 1412 S. Basol, O, Erdem, M. Fink, G. Ianni HEX Programs with Action Atoms
	1415 – 1430		1412 – 1424 C. Wernhard

	K. Korovin, C. Sticksel iProver-Eq: An Instantiation-based Theorem Prover with Equality		Circumscription and Projection as Primitives of Logic Programming
			1424 – 1436 L. M. Pereira, A. M. Pinto Tight Semantics for Logic Programs
1430 – 1500 M. Bruso, K. Chatzikokolakis, J. den Hartog Formal verification of privacy for RFID systems	1430 – 1500 H. de Nivelle Classical Logic with Partial Functions	1425 – 1450 S. Mador-Haim, R. Alur, M. M. K. Martin Generating Litmus Tests for Contrasting Memory Consistency Models	1436 – 1448 J. Near From Relational Specifications to Logic Programs
			1448 – 1500 S. Brass Implementation Alternatives for Bottom-Up Evaluation
1500 – 1530 Coffee break			
Privacy and Anonymity	Non-Classical Logic	Verification of Hardware and Low Level Code	1530 – 1630 ALP Community Meeting Chair: Gopal Gupta
1530 – 1600 G. Barthe, A. Hevia, Z. Luo, T. Rezk, B. Warinschi Robustness guarantees for anonymity	1530 – 1545 C. Beierle, M. Finthammer, G. Kern-Isberner, M. Thimm Automated Reasoning for Relational Probabilistic Knowledge Representation	1530 – 1555 A. Thakur, J. Lim, A. Lal, A. Burton, E. Driscoll, M. Elder, T. Andersen, T. Reps Directed Proof Generation for Machine Code	
1600 – 1630 M. Arapinis, T. Chothia, E. Ritter, M. Ryan Analysing unlinkability and anonymity using the applied pi-calculus	1545 – 1615 R. Gore, F. Widmann Optimal Tableaux for Propositional Dynamic Logic with Converse	1555 – 1620 C. Conway, C. Barrett Verifying Low-Level Implementations of High-Level Datatypes	
1630 – 1700 R. Kuesters, T. Truderung, A. Vogt A game-based definition of coercien-resistance and its applications	1615 – 1645 M. Kaminski, G. Smolka Terminating Tableaux for Hybrid Logic with Eventualities	1620 – 1645 S. Chatterjee, M. Kishinevsky Automatic Generation of Inductive Invariants from High-Level Microarchitectural Models of Communcation Fabrics	1630 – 1800 The 2010 Prolog Programming Contest Chair: Tom Schrijvers
	1645 – 1710 M. C. Mayer, S. Cerrito Herod and Pilate: two tableau provers for basic hybrid logic	1645 – 1710 J. Li, F. Xie, T. Ball, V. Levin Efficient Reachability Analysis of Buchi Pushdown Systems for Hardware/ Software Co-verification	
	Business Meeting (in the FORUM building)	Tools	
	1710 – 1750 CADE Business Meeeting	1715 – 1730 S. Blom, J. van de Pol, M. Weber LTSMIN: Distributed and Symbolic Reachability	
		1730 – 1745 B. Bollig, J.-P. Katoen, C. Kern, M. Leucker, D. Neider, D. R. Piegdon libalf: the Automated Learning Framework	
	1750 – 1830 TABLEAUX Business Meeting	1800 – 1900 Business Meeting	

Sunday, 18 July 2010

CSF	IJCAR	CAV	ICLP
Appleton Tower Lecture Theatre 2	Appleton Tower Lecture Theatre 5	Appleton Tower Lecture Theatre 4	Appleton Tower Lecture Theatre 3
Authorization	Induction	CAV Invited Talk	Technical Communications – III Chair: Agostino Dovier
0900 – 0930 A. Lee, T. Yu On the quantitative analysis of proofs of authorization: applications, framework, and techniques	0900 – 0930 M. Aderhold Automated Synthesis of Induction Axioms for Programs with Second-Order Recursion	0900 – 1000 Somesh Jha Retrofitting Legacy Code for Security	0900 – 0912 K. Bauters, J. Janssen, S. Schockaert, D. Vermier, M. De Cock Communicating Answer Set Programs
			0912 – 0924 T. Fayruzov, J. Janssen, M. De Cock, C. Cornelis, D. Vermier Efficient solving of time-dependent answer set programs
0930 – 1000 L. Bauer, L. Jia, D. Sharma Towards precise specification of logic-based access-control policies	0930 – 1000 D. Baelde, D. Miller, Z. Snow Focused Inductive Theorem Proving		0924 – 0936 M. Balduccini Learning Domain-Specific Heuristics for Answer Set Solvers
			0936 – 0948 T. Janhunen Sampler Programs: The Stable Model Semantics Abstract Constraints Programs Revisited
			0948 – 1000 J. Oetsch, J. Puehrer, H. Tompits Methods and Methodologies for Developing Answer-Set Programs – Project Description
1000 – 1030 Coffee break			
Information Flow	Decision Procedures	Synthesis	Knowledge Representation and Reasoning Chair: Ilkka Niemela
1030 – 1100 M. Y. Becker Information flow in credential systems	1030 – 1100 V. Aravantinos, R. Caferra, N. Peltier A Decidable Class of Nested Iterated Schemata	1030 – 1055 R. Ehlers Symbolic Bounded Synthesis	1030 – 1100 Y. Wang, J.-H. You, L.-Y. Yuan, Y.-D. Shen Loop Formulas for Description Logic Programs
1100 – 1130 A. Russo, A. Sabelfeld Dynamic vs. static flow-sensitive security analysis	1100 – 1115 V. Aravantinos, R. Caferra, N. Peltier RegSTAB: a SAT-Solver for Propositional Schemata	1055 – 1120 K. Chatterjee, T. Henzinger, B. Jobstmann, R. Singh Measuring and Synthesizing Systems in Probabilistic Environments	1100 – 1130 M. Slota, J. Leite Towards Closed World Reasoning in Dynamic Open Worlds
1130 – 1200 A. Chudnov, D. Naumann	1115 – 1145 N. Bjorner Linear Quantifier Elimination	1120 – 1145 S. Graf, D. Peled, S. Quinton	1130 – 1200 J. Delgrande

Information flow monitor inlining	as an Abstract Decision Procedure	Achieving Distributed Control Through Model Checking	A Program-Level Approach to Revising Logic Programs under the Answer Set Semantics
1200 – 1230 S. Chong Required information release	1145 – 1215 O. Friedmann, M. Latte, M. Lange A Decision Procedure for CTL* Based on Tableaux and Automata	1145 – 1210 R. Bloem, K. Chatterjee, K. Geimel, T. Henzinger, B. Jobstmann Robustness in the Presence of Liveness	1200 – 1230 P. Hou, B. De Cat, M. Denecker FO(FD): Extending classical logic with rule-based fixpoint definitions
		1210 – 1225 R. Bloem, A. Cimatti, K. Geimel, G. Hofferek, R. Koenighofer, M. Roveri, V. Schuppan, R. Seeber RATSY – A new Requirement Analysis Tool with Synthesis	
	1215 – 1230 F. Maric, P. Janicic URBiVA: Uniform Reduction to Bit-Vector Arithmetic	1225 – 1240 V. Kuncak, M. Mayer, R. Piskac, P. Suter Comfusy: A Tool for Complete Functional Synthesis	
1230 – 1400 Lunch break			
1400 – 1500 Five Minute Talks	FLoC Keynote Talk (George Square Lecture Theatre) 1400 – 1500 Induction, Invariants, and Abstraction Deepak Kapur		
1500 – 1530 Coffee break			
Security Protocol Verification II	Arithmetic	Concurrent Program Verification – I	CHR and CLP Chair: Terrance Swift
1530 – 1600 S. Meier, C. Cremers, D. Basin Strong invariants for the efficient construction of machine-checked protocol security proofs	1530 – 1600 J. Abourbih, L. Blaney, A. Bundy, F. McNeill A Single-Significant-Digit Calculus for Semi-Automated Guesstimation	1530 – 1555 V. Kahlon, C. Wang Universal Causality Graphs: A Precise Happens-Before Model for Detecting Bugs in Concurrent Programs	1530 – 1600 H. Betz, F. Raiser, T. Fruehwirth A Complete and Terminating Execution Model for Constraint Handling Rules
1600 – 1630 S. Z. Beguellin, G. Barthe, S. Heraud, B. Gregoire, D. Hedin A machine-checked formalization of sigma-protocols	1600 – 1630 H. Bensaid, R. Caferra, N. Peltier Perfect discrimination graphs: indexing terms with integer exponents	1555 – 1620 V. Vafeiadis Automatically proving linearizability 1620 – 1645 P. Cerny, A. Radhakrishna, D. Zufferey, S. Chaudhuri, R. Alur Model Checking of Linearizability of Concurrent List Implementations	1600 – 1630 M. Gabbrielli, J. Mauro, M. C. Meo, J. Sneyers Decidability properties for fragments of CHR
1630 – 1700 B. Schmidt, P. Schaller, D. Basin Impossibility results for secret establishment	1630 – 1700 A. Brillout, D. Kroening, P. Rummer, T. Wahl An Interpolating Sequent Calculus for Quantifier-Free Presburger Arithmetic	1645 – 1710 E. Cohen, M. Moskal, S. Tobies, W. Schulte Local Verification of Global Invariants in Concurrent Programs	1630 – 1700 M. Rodriguez-Artalejo, C. A. Romero-Diaz A Declarative Semantics for CLP with Qualification and Proximity

	Business Meeting (in the FORUM building) 1710 – 1750 IJCAR Business Meeting	1710 – 1735 A. Albarghouthi, A. Gurfinkel, O. Wei, M. Chechik Abstract Analysis of Symbolic Executions	
		Competition Results	
		1735 – 1750 C. Barrett, M. Deters, A. Oliveras, A. Stump Report on SMT-COMP 2010	

Monday, 19 July 2010

CSF	IJCAR	CAV	ICLP
Appleton Tower Lecture Theatre 2	Appleton Tower Lecture Theatre 5	Appleton Tower Lecture Theatre 4	Appleton Tower Lecture Theatre 3
Security Specifications	IJCAR Invited Talk	CAV Invited Talk	ICLP Invited Talk Chair: Manuel Hermenegildo
0900 – 0930 J. Garay, A. Kiayias, H.-S. Zhou A framework for the sound specification of cryptographic tasks	0900 – 1000 Leonardo de Moura Bugs, Moles and Skeletons: Symbolic Reasoning for Software Development	0900 – 1000 Maged Michael Memory Management in Concurrent Algorithms	0900 – 1000 Molham Aref Datalog for Enterprise Software: From Industrial Applications to Research
0930 – 1000 D. Akhawe, A. Barth, P. Lam, J. Mitchell, D. Song Towards a formal foundation of web security			
1000 – 1030 Coffee break			
Language Based Security	Applications	Compositional Reasoning	Applications Chair: Thom Fruehwirth
1030 – 1100 A. Tiu, J. Dawson Automating open bisimulation checking for the spi-calculus	1030 – 1100 V. Cheval, H. Comon-Lundh, S. Delaune Automating security analysis: symbolic equivalence of constraint systems	1030 – 1055 Y.-F. Chen, E. Clarke, A. Farzan, M.-H. Tsai, Y.-K. Tsay, B.-Y. Wang Automated Assume-Guarantee Reasoning through Implicit Learning	1030 – 1100 M. Milano, M. Gavanelli, F. Riguzzi, P. Cagnoli Logic-Based Decision Support for Strategic Environmental Assessment
		1055 – 1120 R. Singh, D. Giannakopoulou, C. Pasareanu Learning Component Interfaces with May and Must Abstractions	
1100 – 1130 S. Ciobaca, V. Cortier Protocol composition for arbitrary primitives	1100 – 1115 C. Dunchev, A. Leitsch, T. Libal, D. Weller, B. W. Paleo The Proof Transformation System CERES		1100 – 1130 M. Gomez-Zamalloa, E. Albert, G. Puebla Test Case Generation for Object-Oriented Imperative Languages in CLP
1130 – 1200 M. Abadi, G. Plotkin On protection by layout randomization	1115 – 1130 D. Kuhlwein, M. Cramer, P. Koepke, B. Schroder Premise Selection in the Naproche System	1120 – 1145 A. Cohen, K. Namjoshi, Y. Sa'ar A Dash of Fairness for Compositional Reasoning	
	1130 – 1200 M. Suda, C. Weidenbach, P. Wischnewski On the Saturation of YAGO	1145 – 1200 A. Cohen, K. Namjoshi, Y. Sa'ar SPLIT: A Compositional LTL Verifier	1130 – 1200 G. Gelfond, C. Baral, E. Pontelli, T. Son Using Logic Programming for Finding Models in the Logics of Knowledge and its Applications
	1200 – 1230 G. Sutcliffe Results of the CASC-J5 System Competition	Tool Session	
		1200 – 1215 M. Bozzano, A. Cimatti, J.-P. Katoen, V. Y. Nguyen, T. Noll, M. Roveri, R. Wimmer A Model Checker for AADL	1200 – 1230 N. P. Lopes, J. N. Perez, A. Rybalchenko, A. Singh

		1215 – 1230 M. Mazo Jr., A. Davitian, P. Tabuada PESSOA: A tool for embedded controller synthesis	Applying Prolog to Develop Distributed Systems
1230 – 1400 Lunch break			
	Description Logic – II	Decision Procedures	Technical Communications – IV Chair: Tomi Janhunen
	1400 – 1430 B. Glimm, I. Horrocks, B. Motik Optimized Description Logic Reasoning via Core Blocking	1400 – 1425 M. Zhou, F. Hei, B.-Y. Wang, M. Gu On Array Theory of Bounded Elements	1400 – 1412 P. Shakarian, V.S. Subrahmanian, M. L. Sapino Using Generalized Annotated Programs to Solve Social Network Optimization Problems
			1412 – 1424 F. Riguzzi, T. Swift Tabling and Answer Subsumption for Reasoning on Logic Programs with Annotated Disjunctions
	1430 – 1500 Y. Kazakov An Extension of Complex Role Inclusion Axioms in the Description Logic SROIQ	1425 – 1450 D. Monniaux Quantifier elimination by lazy model enumeration	1424 – 1436 D. Corapi, A. Russo, E. Lupu Inductive Logic Programming as Abductive Search
			1436 – 1448 M. Alberti, M. Gavanelli, E. Lamma Runtime Addition of Integrity Constraints in Abductive Logic Programs
			1448 – 1500 G. Simari, V. S. Subrahmanian Abductive Inference in Probabilistic Logic Programs
1500 – 1530 Coffee break			
	Termination	Concurrent Program Verification – II	Applications and Systems Chair: Neng-Fa Zhou
	1530 – 1600 N. Hirokawa, A. Middeldorp Decreasing Diagrams and Relative Termination	1530 – 1555 P. Ganty, R. Majumdar, B. Monmege Bounded Underapproximations	1530 – 1600 A. Dal Palu, A. Dovier, F. Fogolari, E. Pontelli CLP-based protein fragment assembly
	1600 – 1630 F. Neurauter, A. Middeldorp, H. Zankl Monotonicity Criteria for Polynomial Interpretations over the Naturals	1555 – 1620 A. Seth Global Reachability in Bounded Phase Multi-Stack Pushdown Systems	1600 – 1630 M. Balduccini, S. Girotto Formalization of Psychological Knowledge in Answer Set Programming and its Application
		1620 – 1645 S. La Torre, P. Madhusudan, G. Parlato Model-checking parameterized concurrent programs using linear interfaces	

	1630 – 1700 S. Winkler, A. Middeldorp Termination Tools in Ordered Completion	1645 – 1710 A. Kaiser, D. Kroening, T. Wahl Dynamic Cutoff Detection in Parameterized Concurrent Programs	1630 – 1700 R. Brummayer, M. Jarvisalo Testing and Debugging Techniques for Answer Set Solver Development
	1700 – 1730 A. Rubio Results of the Termination 2010 System Competition	Tool Session 1710 – 1725 E. M. Hahn, H. Hermanns, B. Wachter, L. Zhang PARAM: A Model Checker for Parametric Markov Models	1700 – 1730 J. Oetsch, J. Puehrer, M. Schwengerer, H. Tompits The System Kato: Detecting Cases of Plagiarism for Answer-Set Programs
	Herbrand Award Ceremony	1725 – 1740 K. Chatterjee, T. Henzinger, B. Jobstmann, A. Radhakrishna GIST: A Solver for Probabilistic Games	
	1730 – 1800 Maria Paola Bonacina (Master of Ceremony) Presentation of the Herbrand Award to David Plaisted (Congratulations!!! :-)	1740 – 1755 A. Ferrante, M. Memoli, M. Napoli, M. Parente, F. Sorrentino A NuSMV Extension for Graded-CTL Model Checking	

Tuesday, 20 July 2010

Workshops

	Type	Event	Place
1	Workshop	FCC – CSF	Appleton Tower 2.12
2	Workshop	VERIFY – IJCAR	Forum G.03
3	Workshop	UniDL – IJCAR/ITP	Forum 1.15
4	Workshop	SVARM+PSY – IJCAR/CAV	Forum 4.31+4.33
5	Workshop	EMSQMS – IJCAR/CAV	Appleton Tower 2.14
6	Workshop	EC2 – CAV	Forum G.07A
7	Workshop	CHR – ICLP	Appleton Tower 2.11
8	Workshop	ASPOCP – ICLP	Forum G.07
9	Workshop	WG17 – ICLP	Forum 4.02

Tuesday, 21 July 2010

Workshops

	Type	Event	Place
1	Workshop	ASA-4 – CSF	Forum G.07
2	Workshop	VERIFY – IJCAR	Forum G.03
3	Workshop	WING – IJCAR	Forum 2.11
4	Workshop	SVARM+PSY – IJCAR/CAV	Forum 4.31+4.33
5	Workshop	EC2 – CAV	Forum G.07A
6	Workshop	ICLP-DC – ICLP	Appleton Tower 2.12
7	Workshop	WCB – ICLP	Appleton Tower 2.14
8	Workshop	WG17 – ICLP	Forum 4.02

School of Informatics, University of Edinburgh

The ***School of Informatics*** is an academic unit of the University of Edinburgh responsible for research, teaching, outreach and commercialisation in Informatics.

It was created in 1998 from the former ***Department of Artificial Intelligence***, the ***Centre for Cognitive Science*** and the ***Department of Computer Science***, along with the **Artificial Intelligence Applications Institute** and the **Human Communication Research Centre**. Research in the School of Informatics draws on these component disciplines and much of it is interdisciplinary in nature. The school is especially well known for research in the areas of artificial intelligence, computational linguistics, system biology and theoretical computer science; but also contributes to many other areas of informatics. The school has over 130 research staff and 75 members of academic staff. Current enrolment includes around 250 research students as well as 475 taught masters and undergraduate students. The school was ranked 1st in the UK according to the Guardian University Tables 2008, as well as being ranked 1st in the 2008 RAE rankings.

The School of Informatics was awarded a 5*A in the UK government's HEFCE, the only computer science department in the country to achieve this highest possible rating. The School is generally considered world-leading, standing with the foremost U.S. Institutes.

The School has seven research Institutes:

- Institute for Adaptive and Neural Computation (IANC)
- Centre for Intelligent Systems and their Applications
- Institute for Communicating and Collaborative Systems (ICCS)
- Institute for Computing Systems Architecture (ICSA)
- Institute of Perception, Action and Behaviour (IPAB)
- Laboratory for Foundations of Computer Science (LFCS)
- Informatics Life Sciences Institute (ILSI)

About Edinburgh

Edinburgh is the capital city of Scotland. It is the second largest city in Scotland and the seventh-most populous in the United Kingdom. Owing to its spectacular, rugged setting and vast collection of Medieval and Georgian architecture, it is often considered one of the most picturesque cities in Europe. The city was one of the major centres of the Enlightenment, led by the University of Edinburgh, earning it the nickname *Athens of the North*. The **Old Town** and **New Town** districts of Edinburgh were listed as a UNESCO World Heritage Site in 1995. There are over 4,500 listed buildings within the city. In May 2010, it had a total of 40 conservation areas covering 23% of the building stock and 23% of the population, the highest such ratios of any major city in the UK. In the 2009 mid year population estimates, Edinburgh had a total resident population of 477,660. Edinburgh is well-known for the annual **Edinburgh Festival**, a collection of official and independent festivals held annually over about four weeks from early August. Another highlight of the city of Edinburgh is, of course, **The Edinburgh Castle**.

Old Town

The Old Town has preserved its medieval plan and many Reformation-era buildings. One end is closed by the castle and the main artery, the Royal Mile, leads away from it; minor streets (called *closes* or *wynds*) lead downhill on either side of the main spine in a herringbone pattern. Large squares mark the location of markets or surround public buildings such as St. Giles' Cathedral and the Law Courts. Other notable places nearby include the Royal Museum of Scotland, Surgeons' Hall and McEwan Hall. The street layout is typical of the old quarters of many northern European cities, and where the castle perches on top of a rocky crag (the remnants of an extinct volcano) the Royal Mile runs down the crest of a ridge from it.

New Town

The New Town was an 18th century solution to the problem of an increasingly crowded Old Town. It is considered by many to be one of the finest examples of Georgian architecture and planning in the world. Confined to the ridge running down from the castle, the plan was to extend the Old Town based on a rigid, ordered grid, which fitted well with enlightenment ideas of rationality. The principal street was to be George Street, which follows the natural ridge to the north of the Old Town. Either side of it are the other main streets of Princes Street and Queen Street. Princes Street has since become the main shopping street in Edinburgh, and few Georgian buildings survive on it. Linking these streets were a series of perpendicular streets. At the east and west ends are St. Andrew Square and Charlotte Square, respectively. The latter was designed by Robert Adam and is often considered one of the finest Georgian squares in the world. Bute House, the official residence of the First Minister of Scotland, is on the north side of Charlotte Square.

The Edinburgh Festival

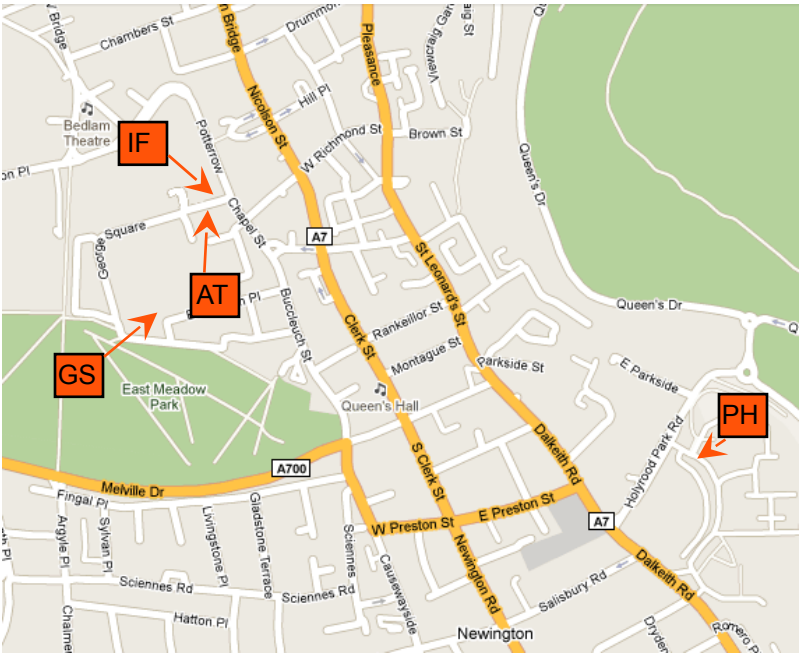
The Edinburgh Festival is a collection of official and independent festivals held annually over about four weeks from early August. It traces its roots to 1947 when the **Edinburgh International Festival (EIF)** was established in a post-war effort to "provide a platform for the flowering of the human spirit". That same year, eight theatrical companies "gatecrashed" the official Festival by organizing their own event, outside the official auspices of the EIF; this started the movement which grew into the Edinburgh Festival Fringe (EFF). The EFF is also referred to as the **Edinburgh Fringe**, the Fringe, or (incorrectly) the Edinburgh Fringe Festival. Since then, the EIF and the Fringe remain independent bodies and run separate programmes each year and several other festivals have also been established in Edinburgh. Therefore, the ``Edinburgh Festival'' is not one Festival, but rather a collection of independent festivals which happen to take place in the same city at about the same time. The most famous of events in the festival are the **Edinburgh Fringe** (the largest performing arts festival in the world), the **Edinburgh International Festival**, the **Edinburgh Military Tattoo**, and the **Edinburgh International Book Festival**.

Edinburgh Castle

Edinburgh Castle is a castle fortress which is located upon the volcanic **Castle Rock**. Human habitation of the site is dated as far back as the 9th century BC although the nature of early settlement is unclear. There has been a royal castle here since at least the reign of David I in the 12th century, and the site continued to be a royal residence until the Union of the Crowns in 1603. From the later 17th century, the castle became a military base, with a large garrison.

Few of the present buildings pre-date the Lang Siege of the 16th century, when the medieval fortifications were largely destroyed by artillery bombardment. The notable exception is St. Margaret's Chapel, the oldest surviving building in Edinburgh, which dates from the early 12th century. Among other significant buildings are the Royal Palace and the early-16th-century Great Hall. The castle also houses the Scottish National War Memorial, and National War Museum of Scotland. ***Drinks Reception of Block 1 of FLoC will take place here on Sunday 11th July, the same time as the 2010 FIFA World Cup Final.***

VENUE AND ACCOMODATION MAP



CONFERENCE VENUES:

AT Appleton Tower,
11 Crichton Street, Edinburgh, EH8 9LE.

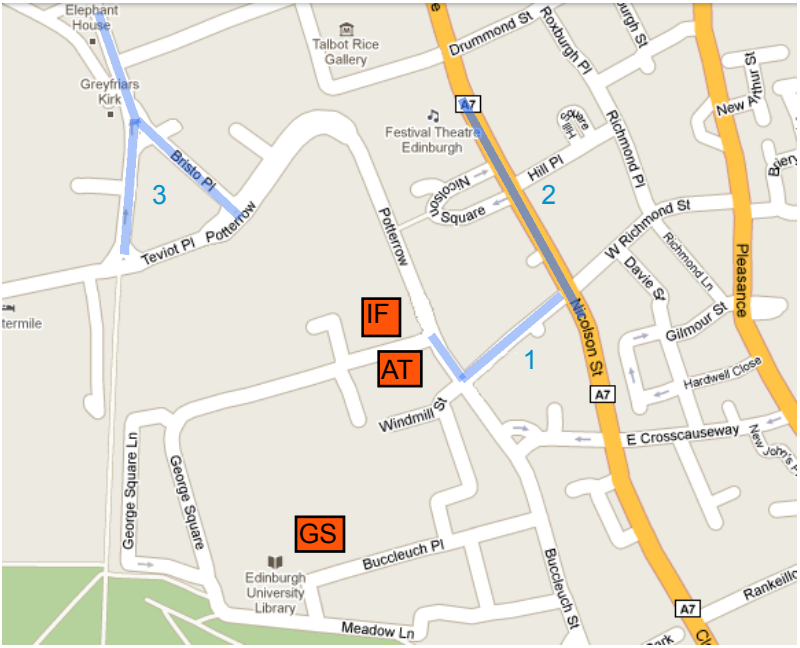
IF Informatics Forum,
10, Crichton Street, Edinburgh, EH8 9AB.

GS George Square Lecture Theatre,
George Square, Edinburgh, EH8 9LK

ACCOMMODATION:

PH Pollock Halls Campus
18 Holyrood Park Road, Edinburgh, EH16 5BQ.

VENUE MAP



CONFERENCE VENUES:

AT Appleton Tower,
11 Crichton Street, Edinburgh, EH8 9LE.

IF Informatics Forum,
10, Crichton Street, Edinburgh, EH8 9AB.

GS George Square Lecture Theatre,
George Square, Edinburgh, EH8 9LK

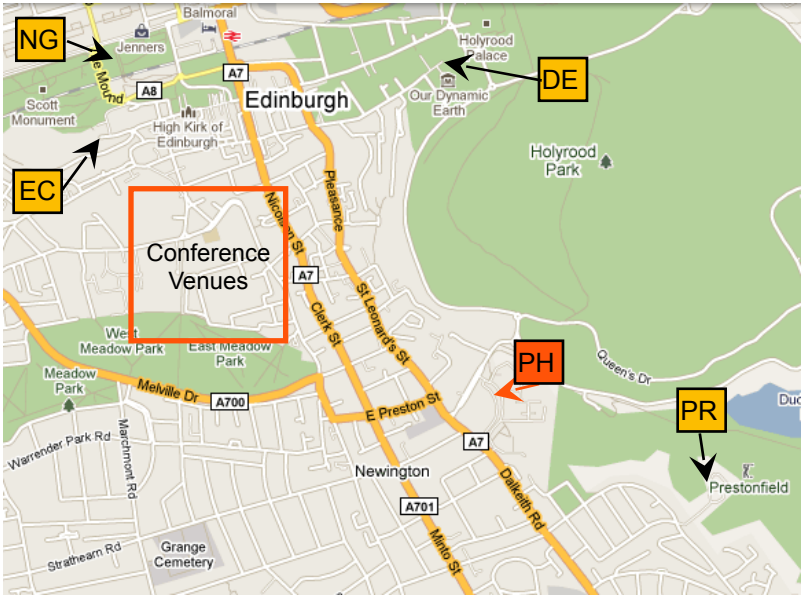
STREETS FOR FOODIES:

1 W. Nicholson St.

2 Nicholson St.

3 Bristo Pl. - Forrest Rd. - George IV Bridge

SOCIAL EVENTS MAP



SOCIAL EVENTS:

EC Edinburgh Castle,
Castlehill, Edinburgh, EH1 2NG.

DE Our Dynamic Earth,
Holyrood Rd, Edinburgh EH8 8AS.

NG The National Galleries of Scotland,
The Mound, Edinburgh, EH2 2EL.

PR Prestonfield House,
Priestfield Road, Edinburgh, EH16 5UT.

ACCOMMODATION:

PH Pollock Halls Campus
18 Holyrood Park Road, Edinburgh, EH16 5BQ.

FLoC 2010 gratefully acknowledges the following sponsors: