20th International Conference on Logic Programming
September 6-10, 2004

PROGRAMME

Palais du Grand Large
Saint-Malo, France

Organisation Committee

Mireille Ducassé (Chair)

Arnaud Gottlieb

Olivier Ridoux

Fausto Spoto

Edith Blin-Guyot

Elisabeth Lebret

Lydie Mabil

Nathalie Saux-Nogues

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Chitta Baral

Gerhard Brewka

Veronica Dahl

Juergen Dix

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Andy King

Vladimir Lifschitz (Program Co-Chair)

Naomi Lindenstrauss

Dale Miller

Ilkka Niemela

Kostis Sagonas

Vitor Santos Costa

Peter Stuckey

Piero Bonatti

Michael Codish

Bart Demoen (Program Co-Chair)

Francois Fages

Gopal Gupta

Antonis Kakas

Evelina Lamma

Fangzhen Lin

Michael Maher

Stephen Muggleton

Andreas Podelski

Chiaki Sakama

Zoltan Somogyi

Paul Tarau

Sunday 5th September

17:00 - 20:00	Registration	Room Lamennais 4 & 5
18:00 - 20:00	Reception – Welcome Cocktail	Room Lamennais 4 & 5

Monday 6th September

8:30 - 9:00	Registration	
9:00 – 10:30	**Opening session: *M. Ducassé, B. Demoen, V. Lifschitz*** Room Lamennais 1 & 2	
	<u>Invited talk</u> **: « Non-determinism lessons » - *Gérard Huet*** Session Chair: **V. Dahl** Room Lamennais 1 & 2	
10:30 - 11:00	**Coffee break**	Room Lamennais 4 & 5
11:00 - 12:30	ANALYSIS session (plenary session) Room Lamennais 1 & 2 Session Chair: **M. Hermenegildo** Abstract Domains Based on Regular Types - *John P. Gallagher, Kim S. Henriksen* Termination of Logic Programs Using Various Dynamic Selection Rules - *Jan-Georg Smaus* Improving Prolog Programs: Refactoring for Prolog - *Tom Schrijvers, Alexander Serebrenik*	
12:30 - 14:30	**Lunch**	Rotunda Surcouf
14:30 – 16:30	CONSTRAINT I session Room Lamennais 1 & 2 Session Chair : **F. Fages** Smodels with CLP and its Applications: A Simple and Effective Approach to Aggregates in ASP - *Islam Elkabani, Enrico Pontelli, Tran Cao Son* The Refined Operational Semantics of Constraint Handling Rules - *Gregory J. Duck, Peter J. Stuckey, María Garcia de la Banda, Christian Holzbaur* Compiling Ask Constraints - *Gregory J. Duck, María Garcia de la Banda, Peter J. Stuckey* Constraint Handling Rules and Tabled Execution label (**best paper award**) - *Tom Schrijvers, David S. Warren*	
	MultiCLP/WLPE workshop Room Lamennais 3 <u>Invited talk</u>: "Regular types, modes and model checking" - *John Gallagher* On termination of binary CLP programs - *Alexander Serebrenik, Fred Mesnard* Upsh: A Unix to Prolog Shell - *Nicos Angelopoulos*	
16:30 - 17:00	**Coffee break**	Room Lamennais 4 & 5
17:00 - 19:30	Prolog Programming Contest Chairs**: Tom Schrijvers, Remko Tronçon** Room Lamennais 3	

Tuesday 7th September

Time	Session
9:00 - 10:30	<u>Tutorial</u> : **"The Implementation of Answer Set Solvers"** - *Ilkka Niemelä* Session Chair : **G. Gupta** Room Lamennais 1 & 2
10:30 - 11:00	**Coffee Break** Room Lamennais 4 & 5
11:00 - 12:30	ALTERNATIVE PARADIGMS I session Room Lamennais 1 & 2 Session Chair : **S. Etalle** Possible Worlds Semantics for Probabilistic Logic Programs - *Alex Dekhtyar, Michael I. Dekhtyar* Limiting Resolution: from Foundations to Implementation - *Patrick Caldon, Eric Martin* Generalised Kernel Sets for Inverse Entailment - *Oliver Ray, Krysia Broda, Alessandra Russo* MultiCPL/WLPE workshop Room Lamennais 3 Assumptions and Abduction in Prolog - *Henning Christiansen, Veronica Dahl* Strategies for the Efficient Solution of Hybrid Constraint Logic Programs - *Stephan Frank, Petra Hofstedt, Dirk Reckmann* Towards Temporal Reasoning in Constraint Contextual Logic Programming - *Vitor Beires Nogueira, Salvador Abreu, Gabriel David*
12:30 - 14:30	**Lunch** Rotonda Surcouf
14:30 - 16:30	IMPLEMENTATION session Room Lamennais 1 & 2 Session Chair : **J. Gallagher** Fast Query Evaluation with (Lazy) Control Flow Compilation - *Remko Tronçon, Gerda Janssens, Henk Vandecasteele* Speculative Computations in Or-Parallel Tabled Logic Programs - *Ricardo Rocha, Fernando Silva, Vitor Santos Costa* AlphaProlog: A Logic Programming Language with Names, Binding and Alpha-Equivalence - *James Cheney, Christian Urban* Implementation Results in Classical Constructive Negation - *Susana Muñoz Hernández, Juan José Moreno Navarro* MultiCLP/WLPE workshop Room Lamennais 3 <u>Invited talk</u>: "Prolog Models for the Model-View-Controller Paradigm" – *David S. Warren* A Logic Programming-based Environment for Integrating Architecture Description Languages - *Qian Wang, Gopal Gupta* FDBG, the CLP(FD) Debugger Library of SICStus Prolog - *Dávid Hanák, Tamás Szeredi* Explanations to Understand the Trace of a Finite Domain Constraint Solver - *Gérard Ferrand, Willy Lesaint, Alexandre Tessier*
16:30 - 17:00	**Coffee break** Room Lamennais 4 & 5
17:00 - 18:30	**Poster session** (list at the end of this programme) Room Lamennais 4 & 5 Session Chair : **M. Ducassé**
19:00 - 23:00	**Banquet** Keynote speaker ***Hervé Gallaire*** *ICLP'04 awards* Rotonda Surcouf *20th Anniversary awards* *Fest Noz (traditional dancing)*

Wednesday 8th September

Time	Content
9:00 - 10:30	<u>Invited talk</u>: **"Answer Set Programming and Design of Deliberative Agents"** - *Michael Gelfond* Room Lamennais 1 Session Chair : V. Lifschitz
	Logic Programs with Annotated Disjunctions – *Joost Vennekens and Sofie Verbaeten and Maurice Bruynooghe*
10:30 - 11:00	**Coffee Break** Room Lamennais 4 & 5
11:30 - 13:00	ANSWER SET PROGRAMMING I session Room Lamennais 1 Session Chair : **I. Niemela** Enhancing the Magic-Set Method for Disjunctive Datalog Programs – *Chiara Cumbo, Wolfgang Faber, Gianluigi Greco, Nicola Leone* Splitting an Operator - *Joost Vennekens, David Gilis, Marc Denecker* Adding Domain Dependent Knowledge into Answer Set Programs for Planning – *Xiumei Jia, Jia-Huai You, Li Yan Yuan* On Acyclic and Head-Cycle Free Nested Logic Programs - *Thomas Linke, Hans Tompits, Stefan Woltran*
	CICLOP workshop Room Lamennais 2 <u>Invited talk:</u> " On Benchmarking Constraint Logic Programming Platforms" - *Kish Shen* Towards a CLP System for Reasoning about Answer Sets - *Omar Elkhatib, Enrico Pontelli, Tran Cao Son* On the implementation of MCMC proposals over Stochastic Logic Programs - *Nicos Angelopoulos, James Cussens*
	PPSWR workshop Room Lamennais 3 <u>Invited talk:</u> Title to be announced *Grosof* On Subtyping of Tree-structured Data A Polynomial Approach - *François Bry, Wlodzimierz Drabent, Jan Maluszynski* Towards generic query, update, and event languages for the Semantic Web - *Wolfgang May, José Júlio Alferes, François Bry*
13:00 - 14:30	**Lunch** Rotunda Surcouf
14:30 - 16:30	CONSTRAINTS II session Room Lamennais 1 Session Chair : **P. Stuckey** On Hybridization of Local Search and Constraint Propagation - *Eric Monfroy, Frédéric Saubion, Tony Lambert* Arc-Consistency + Unit Propagation = Lookahead - *Jia-Huai You, Guiwen Hou* The period Constraint - *Nicolas Beldiceanu, Emmanuel Poder* Non-Viability Deductions in Arc-Consistency Computation - *Camilo Rueda, Frank Valencia*
	CICLOP workshop Room Lamennais 2 Orthogonal Language Constructs for Agent Oriented Logic Programming - *Paul Tarau* Implementation Strategies for Single Assignment Variables - *Frej Drejhammar, Christian Schulte* Optimising P#: Translating Prolog to More Idiomatic C# - *Jonathan J. Cook* Comparing Alternative Approaches for Coupling Logic Programming with Relational Databases - *Michel Ferreira, Ricardo Rocha, Sabrina Silva*
	PPSWR workshop Room Lamennais 3 Data Retrieval and Evolution on the (Semantic) Web: A Deductive Approach - *François Bry, Tim Furche, Paula-Lavinia Patrânjan, Sebastian Schaffert* Rules and Queries with Ontologies: a Unified Logical Framework - *Enrico Franconi, Sergio Tessaris* Semantic Web Reasoning for Ontology-based Integration of Resources - *Liviu Badea, Doina Tilivea, Anca Hotaran* Static Typechecking of Datalog with Ontologies - *Jakob Henriksson, Jan Maluszynski*
16:30 - 17:00	**Coffee break** Room Lamennais 4 & 5

Wednesday 8th September

17:00 - 18:30	**CICLOP workshop** Room Lamennais 2

Wednesday 8th September

<table>
<tr><td rowspan="3">17:00 - 18:30</td><td>CICLOP workshop   Room Lamennais 2
A Logic Programming Framework for Semantic Interpretation with WordNet and PageRank - <i>Paul Tarau, Rada Mihalcea, Elizabeth Figa</i>
Open discussion: "Implementing Constraint Logic Programming: Trends and Challenges"</td></tr>
<tr><td>PPSWR workshop   Room Lamennais 3
Reasoning about Temporal Context using Ontology and Abductive Constraint Logic Programming - <i>Hongwei Zhu, Stuart E. Madnick, Michael D. Siegel</i>
Towards a Multi-Calendar Temporal Type System for (Semantic) Web Query Languages - <i>François Bry, Stephanie Spranger</i>
Calendrical Calculations with Time Partitionings and Fuzzy Time Intervals - <i>Hans Jürgen Ohlbach</i></td></tr>
<tr><td>TeachLP workshop   Room Lamennais 1
<u>Invited Talk</u> : "An On-line Course on constraint Programming" – Christine Solnon
Partial Specifications of Programme Properties - <i>Christoph Beierle, Marija Kulas, Manfred Widera</i>
Teaching Prolog Programming at the Eötvos Loránd University, Budapest – <i>Tibor Asványi</i></td></tr>
<tr><td>18:30 - 19:30</td><td><i>ALP General Assembly</i></td></tr>
</table>

Thursday 9th September

<table>
<tr><td>9:00 - 10:30</td><td><u>Invited talk</u> : "Termination by Abstraction" - <i>Nachum Dershowitz</i>
Session Chair : B. Demoen   Room Lamennais 1

Multi-agent Coordination as Distributed Logic Programming– <i>David Robertson</i></td></tr>
<tr><td>10:30 – 11:10</td><td>Coffee break   Room Lamennais 4 & 5</td></tr>
<tr><td rowspan="3">11:00 – 13:00</td><td>ANSWER SET PROGRAMMING II session   Room Lamennais 1
Session Chair : M. Gelfond
Compiling Prioritized Circumscription into Answer Set Programming – <i>Toshiko Wakaki, Katsumi Inoue</i>
On Programs with Linearly Ordered Multiple Preferences - <i>Davy Van Nieuwenborgh, Stijn Heymans, Dirk Vermeir</i>
Rectilinear Steiner Tree Construction using Answer Set Programming – <i>Esra Erdem, Martin D. F. Wong</i>
Simplifying Logic Programs under Answer Set Semantics - <i>David Pearce</i></td></tr>
<tr><td>TeachLP workshop   Room Lamennais 2
Prolog as Description an Implementation Language in Computer Science Teaching – <i>Henning Christiansen, (presented by John Gallagher)</i>
Teaching Logic Programming at the Budapest University of Technology – <i>Peter Szeredi</i>
A Logic Programming E-learning Tool for Teaching Database Dependency Theory – <i>Paul Douglas, Steve Barker</i></td></tr>
<tr><td>PPSWR workshop   Room Lamennais 3
<u>Invited Talk</u> : Title to be announced - Kiefer
DR-DEVICE: A Defeasible Logic System for the Semantic Web - <i>Nick Bassiliades, Grigoris Antoniou, Ioannis Vlahavas</i>
A PDDL based Tool for Automatic Web Service Composition - <i>Joachim Peer</i></td></tr>
<tr><td>13:00 - 14:30</td><td>Lunch   Rotunda Surcouf</td></tr>
<tr><td rowspan="2">14:30 - 16:15</td><td><u>Tutorial</u> : "Defeasible Logic Programming and Belief Revision" - <i>Guillermo R. Simari</i>
Session Chair : P. Tarau   Room Lamennais 1</td></tr>
<tr><td><i>Conference closing</i></td></tr>
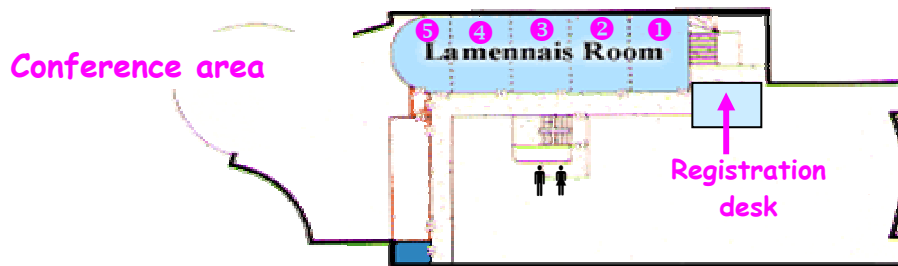<tr><td>16:30 - 20:00</td><td>Trip to Mont Saint Michel</td></tr>
</table>

- Abstract Interpretation-based Mobile Code Certification
  Elvira Albert, German Puebla, Manuel Hermenegildo

- Labeled Logic Programs
  Steve Barker

- Xcerpt and XChange -- Logic Programming Languages for Querying and Evolution on the Web
  François Bry, Paula-Lavinia Patranjan, Sebastian Schaffert

- Protein Folding Simulation in CCP
  Alessandro Dal Palu, Agostino Dovier, Federico Fogolari

- Model and predict extra-functional properties of component-based models
  Olivier Defour, Jean-Marc Jézéquel, Noël Plouzeau

- Main Results of the OADymPPaC Project
  Pierre Deransart

- FDBG, the CLP(FD) Debugger Library of SICStus Prolog
  David Hanak, Tamas Szeredi, Peter Szeredi

- Development of Semantic Debuggers Based on Refinement Calculus
  Rohit N. Kundaj, R. K. Shyamasundar

- A tracer driver to enable debugging, monitoring and visualization of CLP executions from a single tracer
  Ludovic Langevine, Mireille Ducassé

- Grid Service Selection with PPDL
  Massimo Marchi, Alessandra Mileo, Alessandro Provetti

- Concurrent Constraint Programming and Tree--Based Acoustic Modelling
  Moritz Neugebauer

- MProlog: An Extension of Prolog for Modal Logic Programming
  Linh Anh Nguyen

- Probabilistic Choice Operators as Global Constraints : Application to Statistical Software Testing
  Matthieu Petit, Arnaud Gotlieb

- Constraint-based Synchronization and Verification of Distributed Java Programs
  Rafael Ramirez, Juanjo Martinez

- JmmSolve : a generative Java Memory Model implemented in Prolog and CHR
  Tom Schrijvers

- Agent Oriented Logic Programming Constructs in Jinni 2004
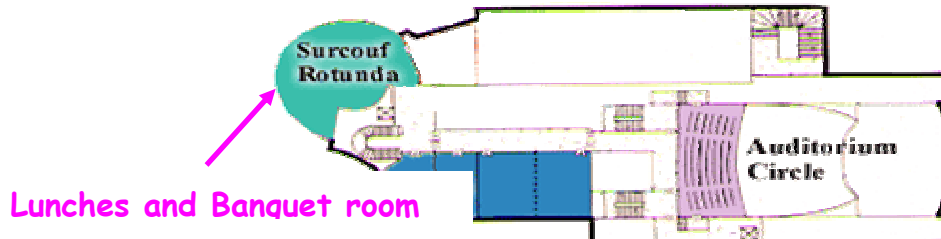 *Paul Tarau*

Useful information

- **The conference** will be held on the third floor of the Palais du Grand Large. The all conference site is a no-smoking area.

- **The registration desk** will be open at the same time as the welcome cocktail and every morning from 8:30.

- **Tourism information:** see the Palais du Grand Large information desk at the main entrance for any information regarding Saint-Malo and the area.

- **The Internet café** is located in room Lamennais 4&5. Five computers will be at your disposal and a free Wireless Internet access will be provided in all conference rooms.

- **Posters:** the poster area is located in Lamennais 4&5. It will be possible to install them from the welcome cocktail on Sunday evening onwards. An adhesive kit will be supplied to the participants – **no pins are allowed**. We ask to the participants to remove their poster on Thursday at noon.

- **Mont-Saint Michel guided tour** will be held on Thursday afternoon. The shuttle will leave the Palais du Grand Large at the end of the session to the Mont Saint-Michel (meeting point in front of the Palais du Grand Large at 16:15). We will be back in Saint-Malo at 20:30 to allow the participants to have diner in town.

- **The last day:** the conference will end on Friday at 12:30. A free shuttle will be at your disposal to go to the railway station. No lunch will be provided.

- **Vouchers:** please leave the vouchers that you don't plan to use in the dedicated box at the registration desk.

- **Name tags:** upon departure, leave your name tag in the dedicated box at the registration desk.

- **Useful phone number:** 06 07 32 62 57 (mobile) from Sunday 5 to Friday 10.

Room configuration in the Palais du Grand Large

Level 3

Conference area

Lamennais Room

Registration desk

Level 2

Surcouf Rotunda

Auditorium Circle

Lunches and Banquet room

With support from