

# REPORT ON ICALP 2010

**37th International Colloquium on Automata, Languages and Programming**  
**6–10 July 2010, Bordeaux**

Manfred Kudlek

**ICALP 2010**, the 37<sup>th</sup> in this series of conferences in Theoretical Computer Science, took place from July 6-10, 2010, including workshops from July 5-10, 2010, in Bordeaux. Conference site was **Mercure Bordeaux Cité Mondiale de Congrès**, in lecture halls **Sylvos, Royat 1, 2, 3**, workshops also in **Burwal 1, 2**.

**ICALP 2010** was organized by **LaBRI Université de Bordeaux**, and **INRIA Bordeaux**. The organizing committee consisted of **Nicolas Bonichon, Pierre Casteran, Lionel Eyraud-Dubois, Cyril Gavoille, Laëtitia Grimaldi, Claude Kirchner, Ralf Klasing, Frédéric Mazoit, Alice Rivière**, as well as **Laurent Dufayet, Pierre Halftermeyer, Emilie Diot, Evangelos Bampas, Lydie Trégan, and Daki- ni Conseil**.

**ICALP 2010** was sponsored by **EATCS, INRIA, LaBRI, CEA (Commissariat à l'énergie atomique et aux énergies alternatives), Conseil Régional d'Aquitaine, GDR Informatique Mathématique (CNRS), Total, GOOGLE, and Office de Tourisme de Bordeaux**.

In connection to **ICALP 2010** the following 5 workshops took place, all on July 5:

WS on Algorithmic Game Theory: Dynamics and Convergence in Distributed Systems (**AlgoGT**)

International WS on DYNamic Networks: Algorithms and Security (**DYNAS**)

International WS on Algorithmic Aspects of Wireless Sensor Networks (**ALGO-SENSORS**)

Semantics in Data and Knowledge Bases (**SDKB**)

Towards Evolutive Routing Algorithms for scale-free/internet-like NETWORKS (**TERA-NET**).

**ICALP** and the workshops were attended by 283 participants from 30 countries, from which 47 were local, and about 80 also in the workshops. Details are given in the table below (C for country, P for participants):

C	P	C	P	C	P	C	P	C	P	C	P
FR	97	CH	11	BE	5	CZ	3	HU	2	DK	1
DE	32	IT	9	CA	5	NL	3	IN	2	HK	1
US	32	JP	7	GR	5	AT	2	PT	2	IS	1
UK	18	PL	7	CN	4	AU	2	SG	2	NZ	1
IL	15	ES	6	SE	4	FI	2	BR	1	TW	1

The scientific program consisted of 6 invited lectures, 3 special (award) talks, and 106 contributions selected from 389 submissions (all were presented). Details on distribution by countries and number of authors are given the tables below (C country, I invited and special, XS submissions in track X, XA accepted in track X,  $\Sigma$  sum). 11 additional submissions were withdrawn.

Apart from the plenary sessions for the invited and special talks it was held in 26 sessions (16 in track A, 7 in B, 3 in C) in 3 parallel tracks (except Tuesday late afternoon and Saturday afternoon with 2).

For the first time there was a also special plenary session for the best papers in each track. The program of **ICALP 2010** and the workshops can be found at <http://icalp10.inria.fr>.

Details of number of invited talks, keynotes (I) and contributions (C) in the workshops are given in the following table:

	I	C
AlgoGT	4	6
DYNAS 2010	3	2
ALGOSENSORS 2010		15
SDKB 2010	2	4
TERA-NET	6	

**ICALP 2010** covered the following fields

<p><b>A</b></p> <ul style="list-style-type: none"> <li>Combinatorial Optimization</li> <li>Game Theory</li> <li>Security</li> <li>Data Structures</li> <li>Sorting and Hashing</li> <li>Graphs, Nets and Optimization</li> <li>Scheduling</li> <li>Graphs and Hypergraphs</li> <li>Algebraic Problems</li> <li>Networks and Communication Theory</li> <li>Complexity and Automata</li> <li>Finding and Testing</li> <li>Approximations</li> </ul>	<p><b>A</b></p> <ul style="list-style-type: none"> <li>Streaming and Preprocessing</li> <li>Adaptive, Knowledge and Optimality</li> <li>Covering, Graphs and Independence</li> </ul> <p><b>B</b></p> <ul style="list-style-type: none"> <li>Automata</li> <li>Formal Languages</li> <li>Semantics</li> <li>Logic</li> <li>Concurrency</li> <li>Probabilistic Computation</li> </ul> <p><b>C</b></p> <ul style="list-style-type: none"> <li>Communication in Networks</li> <li>Fault Tolerance, Ranking</li> <li>Privacy, Selfishness</li> </ul>
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**ICALP 2010** was opened on Tuesday morning by **Claude Kirchner**, thanking all sponsors, and informing us on the social program, lunches, dinners, and facilities at the conference site, finishing with 'Enjoy ICALP!'.

C	I	AS	AA	BS	BA	CS	CA	ΣS	ΣA
AT		$\frac{8}{15}$		$2\frac{7}{12}$	$\frac{1}{2}$	$\frac{1}{2}$		$3\frac{37}{60}$	$\frac{1}{2}$
AU		$4\frac{5}{12}$	1	2	1			$6\frac{5}{12}$	2
BE		$2\frac{1}{2}$	$\frac{1}{2}$	$1\frac{41}{60}$	$\frac{1}{2}$			$4\frac{11}{60}$	1
BR		$\frac{1}{4}$	$\frac{1}{4}$	1				$1\frac{1}{4}$	$\frac{1}{4}$
CA		$5\frac{59}{60}$	$2\frac{7}{12}$	$3\frac{1}{2}$		$1\frac{9}{20}$	$\frac{3}{4}$	$10\frac{14}{15}$	$3\frac{1}{3}$
CH	2	4	$1\frac{1}{2}$	$\frac{7}{12}$		$2\frac{1}{4}$	$\frac{3}{4}$	$6\frac{5}{6}$	$2\frac{1}{4}$
CL		$1\frac{1}{4}$						$1\frac{1}{4}$	
CN		$11\frac{1}{30}$	3	$5\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$		$17\frac{1}{30}$	$3\frac{1}{2}$
CY				$\frac{1}{2}$				$\frac{1}{2}$	
CZ		$2\frac{3}{7}$	1	$2\frac{1}{3}$	$1\frac{1}{4}$			$4\frac{16}{21}$	$2\frac{1}{4}$
DE	2	$30\frac{5}{21}$	$6\frac{29}{30}$	$11\frac{1}{2}$	$4\frac{7}{12}$	$1\frac{9}{10}$	$\frac{5}{6}$	$43\frac{67}{105}$	$12\frac{23}{60}$
DK		$3\frac{1}{3}$	$1\frac{1}{6}$			$\frac{7}{12}$		$3\frac{11}{12}$	$1\frac{1}{6}$
DZ				1				1	
EG		$\frac{1}{3}$						$\frac{1}{3}$	
ES		2	2	2		$\frac{1}{2}$		$4\frac{1}{2}$	2
FI		$\frac{1}{2}$	$\frac{1}{2}$	$1\frac{1}{6}$				$1\frac{2}{3}$	$\frac{1}{2}$
FR	2	$5\frac{11}{15}$	$1\frac{1}{3}$	$22\frac{17}{30}$	$8\frac{5}{6}$	$3\frac{3}{4}$	$1\frac{1}{4}$	$32\frac{1}{20}$	$11\frac{5}{12}$
GR		2	$1\frac{1}{3}$	1		$2\frac{1}{4}$		$5\frac{1}{4}$	$1\frac{1}{3}$
HK		$4\frac{7}{15}$	$1\frac{1}{6}$			$1\frac{5}{6}$	$\frac{5}{6}$	$6\frac{3}{10}$	2
IL		$17\frac{3}{4}$	$5\frac{4}{5}$	2	1	$6\frac{7}{60}$	3	$25\frac{13}{15}$	$9\frac{4}{5}$
IN		$4\frac{83}{420}$	$\frac{1}{4}$	3		$\frac{2}{5}$		$7\frac{251}{420}$	$\frac{1}{4}$
IR		$\frac{1}{2}$	$\frac{1}{4}$			$1\frac{8}{21}$		$1\frac{37}{42}$	$\frac{1}{4}$
IS		$\frac{3}{4}$	$\frac{3}{4}$					$\frac{3}{4}$	$\frac{3}{4}$
IT		$10\frac{3}{4}$	$2\frac{3}{4}$	11	$2\frac{5}{12}$	$3\frac{1}{2}$	1	$25\frac{1}{4}$	$6\frac{1}{6}$
JP		$10\frac{3}{4}$	$\frac{1}{4}$	1		1		$12\frac{3}{4}$	$\frac{1}{4}$
KR		$\frac{8}{15}$						$\frac{8}{15}$	
LU		$\frac{1}{4}$						$\frac{1}{4}$	
LV		1						1	
MT				$\frac{1}{3}$				$\frac{1}{3}$	
NL		$4\frac{1}{5}$	1	$3\frac{11}{12}$	$2\frac{7}{12}$	$1\frac{1}{15}$		$9\frac{11}{60}$	$3\frac{7}{12}$
NO		$\frac{14}{15}$		$1\frac{2}{3}$				$2\frac{3}{5}$	
PL	1	$2\frac{5}{6}$	1	$1\frac{1}{2}$	1	5		$9\frac{1}{3}$	2

RS				$\frac{1}{3}$			$\frac{1}{3}$	
RU		$\frac{1}{4}$		1		$\frac{1}{4}$	$\frac{1}{4}$	$1\frac{1}{2}$
SA				$\frac{1}{2}$			$\frac{1}{2}$	$\frac{1}{4}$
SE		$1\frac{5}{6}$	$1\frac{1}{6}$	$\frac{1}{3}$			$2\frac{1}{6}$	$1\frac{1}{6}$
SG		$3\frac{1}{4}$				$1\frac{1}{5}$	$4\frac{9}{20}$	$1\frac{1}{2}$
SK		1					1	
TH		$\frac{1}{3}$	$\frac{1}{3}$				$\frac{1}{3}$	$\frac{1}{3}$
TW		$2\frac{1}{4}$					$2\frac{1}{4}$	
UA		$\frac{1}{5}$	$\frac{1}{5}$				$\frac{1}{5}$	$\frac{1}{5}$
UK	1	$6\frac{5}{6}$	1	$17\frac{5}{12}$	$4\frac{5}{6}$	$2\frac{29}{60}$	$1\frac{1}{12}$	$26\frac{11}{15}$
US	1	$71\frac{253}{420}$	$20\frac{19}{20}$	$9\frac{1}{3}$	1	$15\frac{239}{420}$	$5\frac{3}{4}$	$96\frac{53}{105}$
Σ		222	60	114	30	53	16	389
								106

	AS	AA	BS	BA	CS	CA	ΣS	ΣA
1	36	7	30	5	4		70	12
2	80	21	35	9	15	6	130	36
3	60	15	34	11	11	5	105	31
4	32	11	13	5	15	5	60	21
5	9	2	2		6		17	2
6	3	3			1		4	3
7	2				1		3	
	222	60	114	30	53	16	389	106
W	7		4				11	

The first invited talk ‘Physical Algorithms’ by **Roger Wattenhofer**, very well illustrated, was a very good and interesting survey on CPU trends, future computing (better, bigger screen, more, cooler design), multicore revolution, examples of physical algorithms, statistical physics, natural algorithms, clock synchronization, wireless communication, network capacity, agents and some verifying theory, finishing with the summary ‘washing machine, clock, wireless’.

**Jean Goubault-Larrecq**, with the second one, ‘Noetherian Spaces in Verification’, starting with ‘A pretty dense talk’, presented an excellent, fast and interesting overview on well structured transition systems, well quasi-orders, Noetherian spaces, verification (e.g. used for Ariane in Guayana), Dickson and Higman lemmata, and topologies in Noetherian space. He was introduced by

**Claude Kirchner** mentioning his numerous affiliations (Preuves, Programmes et Systèmes, UMR 7126, Université Paris Diderot, LSV, ENS Cachan, CNRS, INRIA).

An excellent third invited lecture was given by **Emo Welzl**, with ‘*When Conflicting Constraints Can be Resolved - The Lovász Local Lemma and Satisfiability*’, starting with ‘*Talk not in French*’ and an example from restaurant (fish or chicken or vegetarian for lunch, etc.). He focussed on the problem of the amount of interleaving of constraints to be not satisfiable simultaneously, presenting the Lovász Local Lemma (LLL), its algorithmic version, and recent results by **Heidi Gebauer**, **Robin Moser**, **Dominik Scheder**, **Gábor Tardos** to construct unsatisfiable  $k$ -CNF formulas. Unfortunately, there is only a short abstract in the proceedings.

**Joël Ouaknine** (co-author **James Worrell**, and **Alex Rabinovich**, **Mark Jenkins**) gave a very clear and interesting fast fourth invited lecture ‘*Towards a Theory of Time-Bounded Verification*’. Showing also pictures of *Moshe Vardi*, *Boris Trakhtenbrot*, *Airbus A350XWB*, *Rajeev Alur*, *David L. Dill*, *Yoram Hirshfeld*, *Alexander Rabinovich*, *Stephen Hawking* and *Saharon Shelah*, he gave a survey on relations between automata, temporal logic and predicate logic, verification, timed automata, metric logics, alternating timed automata, expressiveness, decision problems, and future directions in timed systems.

The fifth one by **Pierre Fraigniaud** on ‘*Informative Labeling Schemes*’, starting with meaning of names (his own one has none), was a very good and interesting, fast survey on graph representation of traditional informative labeling as in trees, distance labelings (e.g. between tree nodes), routing (tree cover of graphs, compact routing in trees), universal graph in a family, size of smallest universal graph for trees, randomization, and generalization to dynamic networks. Unfortunately, the proceeding contain only a short abstract.

**Burkhard Monien** (co-authors **Dominic Dumrauf**, **Tobias Tscheuschner**), with a sixth invited talk ‘*Local Search: Simple, Successful, but Sometimes Sluggish*’ gave a nice and interesting survey on optimization problems, (meta) heuristics, local search (simplex algorithm and other methods),  $\mathcal{PLS}$  problems, exponential long sequences,  $\mathcal{PLS}$  reductions,  $\mathcal{PLS}$  complete problems (MAXCUT, TSP), relations to game theory and congestion games, Nash equilibria, approximation in  $\mathcal{PLS}$ , and open problems in combinatorial optimization, game theory and smoothed complexity, borders of  $\mathcal{PLS}$  completeness. He finished with ‘*What to take home? Local search standard approach to approximation, in general only low knowledge*’.

Special award lectures were given on Friday afternoon. The **Gödel** 2010 price was given to **Sanjeev Arora** for ‘*Polynomial time Approximation Schemes for Euclidean TSP and other Geometric Problems*’ (Journal ACM 45(5), 753-782, 1998) and **Joseph S. B. Mitchell** for ‘*Guillotine Subdivisions Approximate Polygonal Subdivisions: A Simple-Polynomial Time Approximation Scheme for Geometric TSP,  $k$ -MST, and Related Problems*’ (SIAM Journal Computing 28(4), 1298-1309,

1999). After **Burkhard Monien** explained the price, **Jean-Pierre Jouannaud** introduced the laureates.

Both then gave an excellent joint talk '*PTAS's for Geometric TSP, Steiner Tree, and other NP-hard Problems*', well illustrated, on the history of TSP (Gauss, Karp, Papadimitriou), the structure theorem and its generalizations, related problems, suitable metrics, and other TSPN (with neighbours).

The laureat of the **EATCS** award was **Kurt Mehlhorn**. He was introduced by **Emo Welzl**, presenting a short CV of him. **Kurt Mehlhorn** then presented '*Why I did What I Did*', in which he talked on beauty of CS ( mathematician in the morning, engineer in the evening, act of creation), short CV (study, paper and pencil work on algorithms and complexity, LEDA, CEAL, EXACUS, teaching, textbooks), Why? ( library of efficient data types and algorithms), certifying algorithms (must prove their answers are correct), geometric computing (in LEDA, failure of some instances, improved by a student), Which theorems to prove? (inspired by experimental work, important vs. difficult), Why science management? (hard to avoid, enjoy, investment by society).

The **Presburger** award, a new award, received **Mikołaj Bojańczyk** for numerous results in automata theory, logic, and algebra in computer science. **Jean-Éric Pin** introduced him and gave the laudatio. Then the laureat presented with '*Documents on Mojżesz Presburger*' (there is a z instead of s in his birth certificate!) the life of the logician, born December 27, 1904 in Warsaw, his study (1923-1930) of mathematics and logic at Warsaw university (teachers Kazimierz Ajdukiewicz, Stanisław Leśniewski, Jan Łukasiewicz, and others), finished with MSc and the famous thesis (his only publication), jobs in insurance company, and death in 1943? in a German concentration camp. More details can be found in '*Mojżesz Presburger: Life and Work*' by Jan Zygmunt has been published in *History and Philosophy of Logic* **12**, pp. 211-223, 1991.

In the best paper award session on Wednesday afternoon **Leslie Ann Goldberg** and **Mark Jerrum** received the award in track A for '*Approximating the Partition Function of the Ferromagnetic Potts Model*', which was very well presented by the first author. In track C **George B. Mertzies** (co-authors **Ignasi Sau**, **Mordechai Shalom**, **Shmuel Zaks**) (also the fourth author was present) got it for '*Placing Regenerators in Optical Networks to Satisfy Multiple Sets of Requests*'. It also was very well presented by the first author.

Finally, **Jörg Flum** (co-author **Yijia Chen**) got the award in track B for '*On  $p$ -Optimal Proof Systems and Logics for PTIME*', also very well presented.

Also to mention (very personally selected) are some of the other contributions. Good and interesting presentations were given by **Blaise Genest** on Zielonka's theorem for construction of asynchronous DFA, by **Philippe Schoebelen** on pumping and counting on the Post embedding problem, by **Arnaud Carayol** on

ordinals, logics and linear orders in pushdown hierarchy, and the excellent ones by **Udi Boker** on nondeterminism, universality, alternation for Boolean operations, removing alternations in Büchi automata, mentioning also *George Orwell* (1984), and finishing with a DFA *‘T h a n k s’*, as well as by **Jean-Éric Pin** on lattices of languages, minimal recognizers, topological characterization and recognition, and equational theory.

Other good and interesting presentations were given by **Georg Zetsche** on erasing productions in random context grammars and relation to an open problem for matrix grammar, by **Martin Dietzfelbinger** on tight thresholds for cuckoo hashing, by **Richard Cole** on resource oblivious sorting on multicores, and by **James Laird** on game semantics for polymorphism.

Also to mention are the good, clear and interesting talks by **Francesco Ranzato** on example-guided simplification of abstraction in model checking, by **Carroll Morgan**, on compositional closure in probabilistic noninterference, starting with *‘This slide shows the whole talk, what, why’*, well illustrated, among others dining cryptographers, lovers and millionaires, and 3 judges, by **Ross Duncan** on rewriting measurement-based quantum computations, using *yay!*, *boo!* for  $+$ ,  $-$ , by **Aleks Kissinger** on compositional structure of multipartite quantum entanglement, identifying entangled states with algebraic operations, and the excellent presentation by **Bruce Litow** on sums of roots of unity, and algorithms for computation of certain bounds, starting with *‘Perhaps the simplest problem of this conference!’*.

Good and interesting contributions were also presented by **Holger Dell** on exponential time complexity of the permanent and Tuttle polynomial, and ETH (not *‘Eidgenössische Technische Hochschule’* where next ICALP will take place, but *‘Exponential Time Hypothesis’*), by **György Turán** on approximate Horn formula minimization, by **Jorge A. Pérez** on expressiveness of polyadic and synchronous communication in higher-order process calculi, showing nice illustrations as prisma, Russian doll, oil on water, and Trojan horse. Very good and clear presentations were given by **Roland Meyer** on effective computability of the downward-closure of Petri net languages, by **Tomáš Brázdil** on reachability 2-player games on extended vector addition systems with states and their decidability problems, and by **Klaus Ambos-Spies** on weak completeness notions for exponential time, as weak and strong E-nontriviality.

Other good and interesting presentations were given by **Mikołaj Bojańczyk**, with problems to start (to find his USB stick, his laptop fell from the desk, *‘More entertainment, less proofs!’*), on efficient evaluation of nondeterministic automata using factorization forests (*‘Since you are in track A not evryone might know about monoids’*) and a transducer model for data trees, by **Tobias Jacobs** on average-case minimization in search complexity in trees with an illustration of mouse searching cheese, by **Christoph Haase** on decidability and complexity of model

checking problems for one-counter automata, by **Benjamin Monmege** on pebble weighted automata and transitive closure logics, by **Laurent Doyen** on energy parity games and their complexity, and by **Loukas Georgiadis** on complexity of 2-vertex connectivity in directed graphs.

The proceedings, edited by **Samson Abramsky**, **Cyril Gavoille**, **Claude Kirchner**, **Friedhelm Meyer auf der Heide**, and **Paul G. Spirakis**, have been published in two volumes as Springer LNCS 6198 (containing the contributions in track A) and LNCS 6199 (with the contributions in tracks B and C), unfortunately the invited lectures by **Emo Welzl** and **Pierre Fraignaud** only as abstracts.

At the EATCS general assembly on Wednesday late afternoon **Moti Yung** received an EATCS button by the author of this report, for reaching 5 full papers at ICALP. The current state of most active authors is given in the table in the next page. Other 5 buttons got the editors of the proceedings. Each participant either got an ICALP 2010 cup with a piece of chalk or an ICALP 2010 bottle opener, and an extremely useful ticket for Bordeaux public traffic for a whole week covering the ICALP period.

In the coffee breaks coffee, tea, juice, mineral water, cakes, pancakes, and fruits were offered. Lunch was not included in the conference fee such that many participants, although there was a special offer of the restaurant in the conference building, went to restaurants nearby. Access to internet only was possible by wireless in a rather restricted area. As traditional there was a *Springer* book exhibition, represented by **Alfred Hofmann** and **Frank Holzwarth**. Most participants stayed in the conference hotel **Mercure Bordeaux Cité Mondiale Centre de Congrès** or in **Mercure Cartrons** nearby.

The social program started on Monday late afternoon with a wine and cheese reception on top of **Bordeaux Cité Mondiale**, from where there was a beautiful view on Bordeaux. There we got white and red wine from the region, as well as mineral water, juice, cheese, and bread. It ended around 20 h.

On Thursday afternoon we had a guided tour in 4 groups through the quarter **Chartrons**, formerly a wine trading place. Because of the high temperatures a visit to nearby **Jardin Public** was skipped, and the guided tour ended at **Cellier des Chartrons** with **Bordeaux Musée du Vin et du Négoce** (Bordeaux Wine and Trade Museum), where we had a wine tasting party, together with typical snacks of the region. There we could taste six wines (two red, three rosé, one white). On Friday late afternoon we went to the **Château Cazeneuves**, about 70 km south of Bordeaux. There was a guided tour through the castle, a small reception with red and white wine, before the conference banquet started with rich cold and warm buffet, red and white wine of the region, mineral water, fruits and coffee. Around midnight we arrived at Bordeaux again. Weather was hot, with highest temperatures between 30 and 35°C.

<i>ICALP Contributors</i>			
Kurt Mehlhorn	$12\frac{1}{5}$		
Jean-Éric Pin	$11\frac{2}{3}$	Dominique Perrin	$4\frac{5}{6}$
Juhani Karhumäki	$9\frac{7}{60}$	Zohar Manna	$4\frac{5}{6}$
Mihalis Yannakakis	$8\frac{3}{4}$	Bruno Courcelle	$4\frac{5}{6}$
Zvi Galil	8	Moshe Vardi	$4\frac{5}{6}$
Amir Pnueli	$7\frac{1}{2}$	Juraj Hromkovič	$4\frac{7}{10}$
Christos Papadimitriou	$7\frac{1}{3}$	Paul Spirakis	$4\frac{7}{10}$
Philippe Flajolet	$7\frac{1}{4}$	Thomas Wilke	$4\frac{2}{3}$
Grzegorz Rozenberg	7	Denis Thérien	$4\frac{7}{12}$
Paul Vitányi	$6\frac{11}{12}$	Manfred Droste	$4\frac{1}{2}$
Claus-Peter Schnorr	$6\frac{1}{2}$	Robin Milner	$4\frac{1}{2}$
Torben Hagerup	$6\frac{1}{2}$	Mikołaj Bojańczyk	$4\frac{1}{2}$
Géraud Sénizergues	$6\frac{1}{2}$	Bernard Chazelle	$4\frac{10}{21}$
Burkhard Monien	$6\frac{19}{60}$	David Peleg	$4\frac{7}{10}$
John Reif	$6\frac{1}{12}$	Ming Li	$4\frac{5}{12}$
Karel Čulik II	6	Amin Coja-Oghlan	$4\frac{1}{3}$
Walter Vogler	6	Thomas Colcombet	$4\frac{1}{3}$
Joost Engelfriet	$5\frac{1}{2}$	Maurice Nivat	$4\frac{1}{4}$
Matthew Hennessy	$5\frac{1}{2}$	Volker Diekert	$4\frac{1}{6}$
Arto Salomaa	$5\frac{1}{2}$	Piotr Berman	$4\frac{1}{6}$
Juris Hartmanis	$5\frac{1}{3}$	Marek Karpiński	$4\frac{1}{6}$
Andrzej Lingas	$5\frac{1}{3}$	Sudipto Guha	$4\frac{1}{12}$
Michael Rabin	$5\frac{1}{3}$	Anca Muscholl	$4\frac{1}{12}$
Thomas Henzinger	$5\frac{1}{3}$	Christophe Reutenauer	4
Moti Yung	$5\frac{1}{3}$	Marcel Paul Schützenberger	4
Ronald Book	$5\frac{1}{4}$	Davide Sangiorgi	4
Christian Choffrut	5	Colin Stirling	4
Arnold Schönhage	5	Ian Munro	4
Leslie Valiant	5	James Laird	4

Next **ICALP** will be held at **ETH Zürich**, July 4-8, 2011. **ICALP 2010** was a successful conference again, of high level and in a nice atmosphere, very well organized. Thanks to the organizers. It is planned to put pictures of the conference at <http://picasaweb.google.gr/ICALP2010/>.

**Au Revoir Bordeaux and Uf Widerluege, Grüezi in Züri.**