# Brussels, 1972
## Where, when and why EATCS and ICALP started

*Marcel-Paul Schützenberger at the first ICALP conference, July 3-7 1972*

Informatics or computer science was seen by other disciplines and by many politicians as simply a technology to support other enterprises. It was already clear however that to improve the correctness and efficiency of large-scale programs, theoretical studies were needed to investigate the principles and properties of computing. At the time, such work in Europe tended to be local and national. New funding for inter-European collaboration would be required.

## IN THOSE YEARS

*There was a very special spirit in the air; we knew that we were witnessing the birth of a new scientific discipline centered on the computer* – (R. Karp)

*There was absolutely no appreciation of the work on the issues of computing. Mathematicians did not recognize the emerging new field* – (M. Rabin)

**Rapport préliminaire sur l'Informatique Théorique**
(M. Nivat, L. Nolin, M.-P. Schützenberger, 1971)

This report outlines the main pillars of the new science and, for each pillar, describes the research subject addressed, with reference to a few specific authors:

— Algorithms, with specific reference to arithmetic operations (Winograd), sorting (Knuth, Floyd), graph algorithms (Rabin);

— Automata and formal languages, with reference to equations on the free monoid (Lentin), codes, finite automata and regular languages (Kleene, Krohn & Rhodes), push-down automata and context-free languages (Schützenberger), tree automata;

— Formal semantics of programming languages, where with experience from the syntactic and semantic definition of Algol 68, the need to provide precise formulations of the semantics of programming languages is discussed, based on the early works on axiomatic semantics (Floyd), operational semantics (McCarthy), approaches to semantics based on lambda-calculus (Scott) and combinatory logic (Nolin), and the theory of program schemes (Ianov, Luckham, Park & Paterson, and Strong).
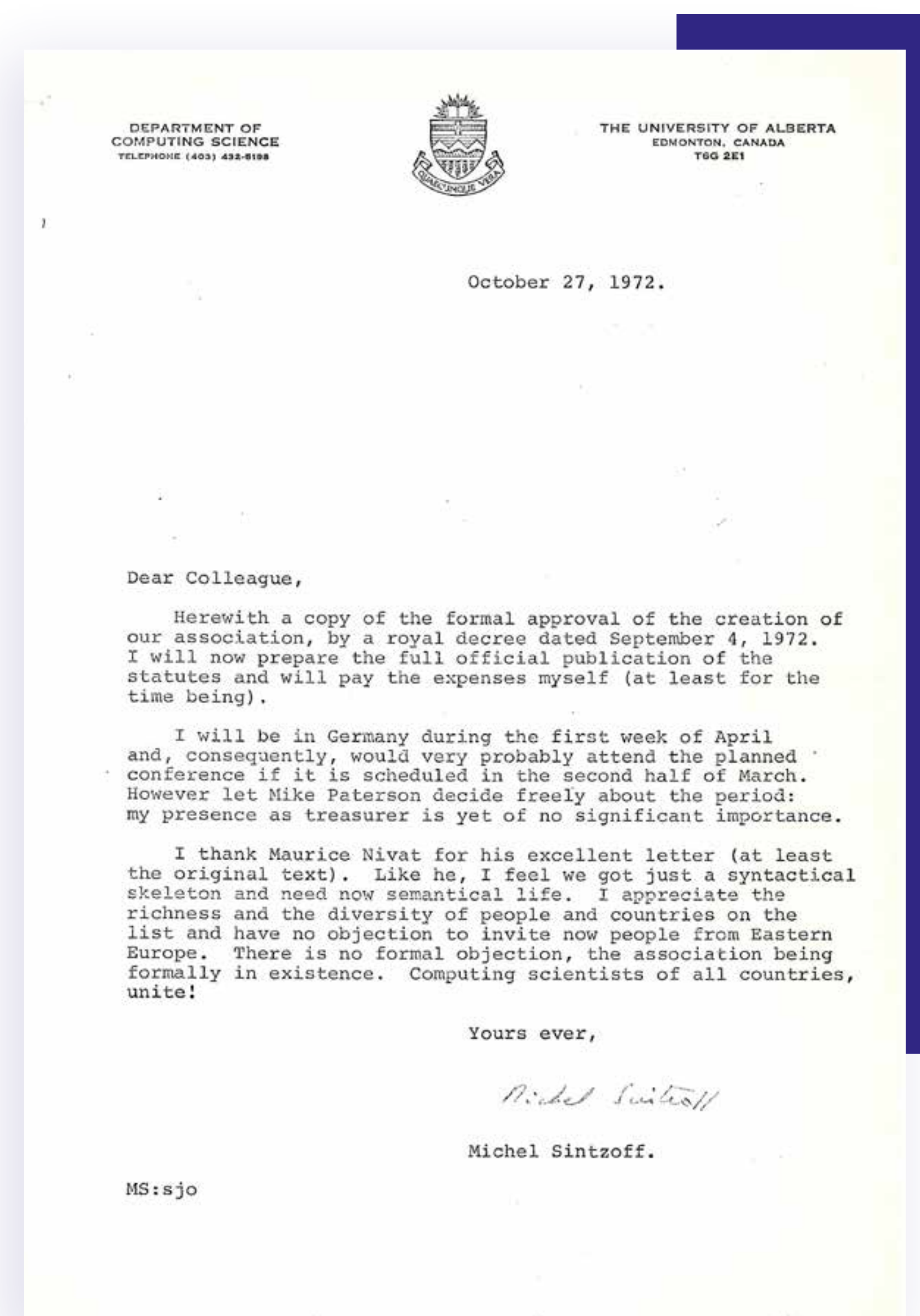
The report underlines the theory of operating systems, of parallel concurrent and cooperating processes, and of the corresponding computation models (Dijkstra, Naur, Wirth) expected to play an important role in the future.

## FOUNDATION OF THE EATCS

■ At the Berlaymont building of the EU Commission in Brussels, on January 27-28, 1972, there is a meeting chaired by Alfonso Caracciolo.

**Participants:** M. Nivat, L. Nolin, M. Gross (F), H. Langmaack, K. H. Böhling (D), l. Verbeek, J. de Bakker (NL), M. Paterson (UK), M. Sintzoff (B), C. Böhm, U. Montanari, G. Ausiello (I).

After presenting the report of M. Nivat, L. Nolin and M.-P. Schützenberger, they approve the proposal prepared by Maurice Nivat on cooperation among European universities, which leads in September to the creation of the European Association for Theoretical Computer Science (EATCS).
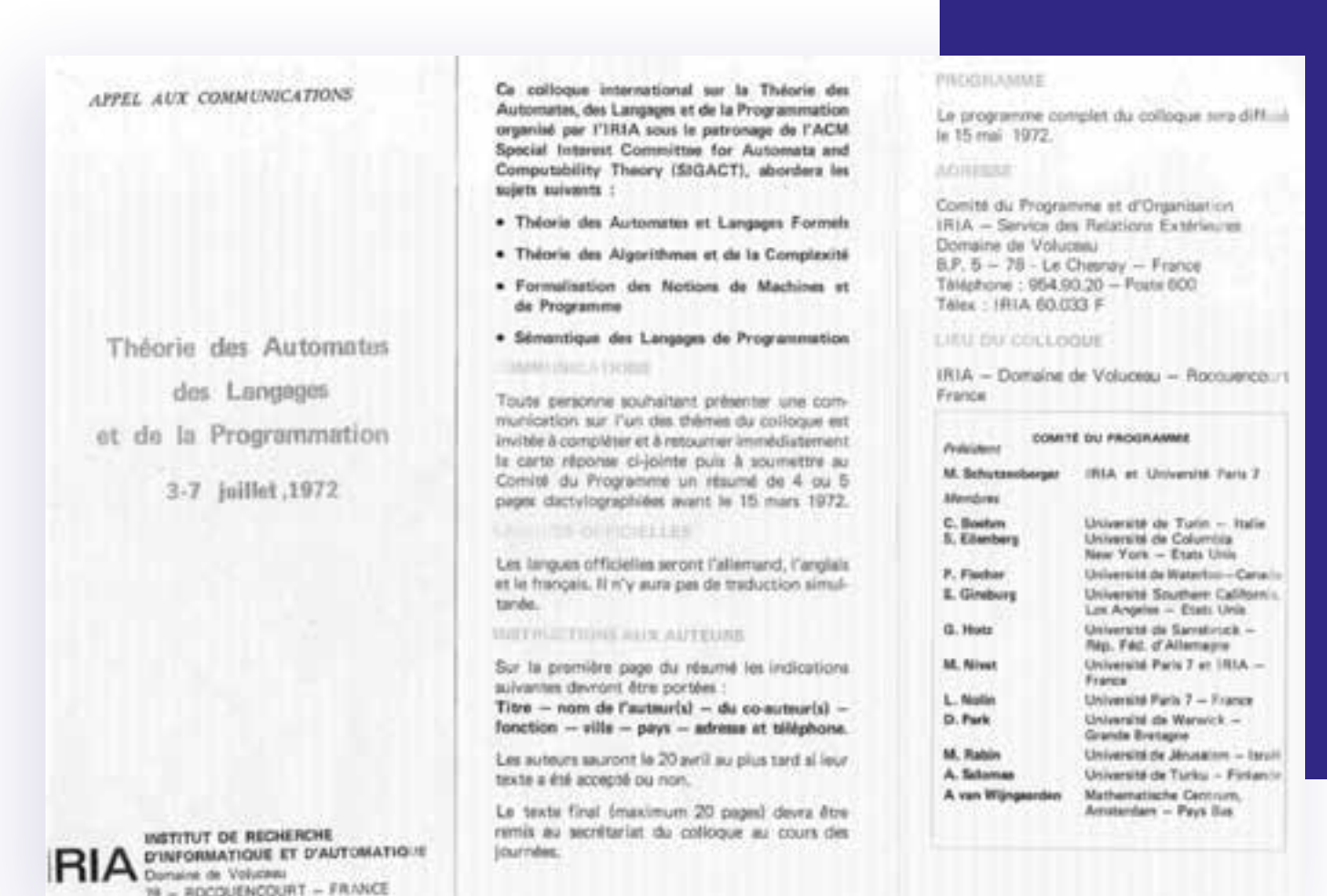


## FIRST ICALP

■ On July 3-7, 1972, at IRIA (Rocquencourt, Paris) the first ICALP takes place. The Program Committee of C. Böhm, S. Eilenberg, P. Fischer, S. Ginzburg, G. Hotz, M. Nivat, L. Nolin, D. Park, M. Rabin, A. Salomaa, and A. van Wijngaarden is chaired by M.-P. Schützenberger.

The program includes 45 accepted papers (29 in English, 14 in French, 2 in German) on automata theory, theory of programming, theory of formal languages, and complexity of algorithms.



*Maurice Gross and Maurice Nivat at the first ICALP*



*Programme of the first colloquium*

## FIRST BULLETIN

■ On December 1973, Maurice Nivat prepares the first Bulletin of EATCS at IRIA, Rocquencourt. The bulletin includes the minutes of the first general assembly and council meeting; reports on the second MFCS; and provides activity reports of the Mathematisch Centrum, Amsterdam, the Technological University, Delft, the Technological University, Twente, the Istituto di Scienza dell'Informazione, Università di Torino and the Institut de Programmation, Université Paris VI.



## EATCS AWARDS

■ Awarded annually since 2000, this honours scientists from the community of Theoretical Computer Science in acknowledgment of their extensive and widely recognized contributions over a lifelong scientific career.

Richard Karp (2000), Corrado Böhm (2001), Maurice Nivat (2002), Grzegorz Rozenberg (2003), Arto Salomaa (2004), Robin Milner (2005), Mike Paterson (2006), Dana S. Scott (2007), Leslie G. Valiant (2008), Gérard Huet (2009), Kurt Mehlhorn (2010), Boris (Boaz) Trakhtenbrot (2011), Moshe Y. Vardi (2012), Martin Dyer (2013), Gordon Plotkin (2014), Christos Papadimitriou (2015), Dexter Kozen (2016), Éva Tardos (2017), Noam Nisan (2018), Thomas Henzinger (2019), Mihalis Yannakakis (2020), Toniann (Toni) Pitassi (2021), Patrick Cousot (2022)