# Curriculum Vitae (October 2015)

Jean-Claude Bermond

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Date of Birth: December 15, 1945.

## Education

Thèse d'État at Université Paris-Sud Orsay, 1975.

Agrégation in Mathematics (rank 5), 1969.

Elève ENS ULM (promotion 1965).

#### Academic Positions

Since 2011: Retired, Directeur de Recherche Emeritus CNRS at I3S laboratory, Sophia-Antipolis. "Chargé de mission" International Attractiveness, INRIA Sophia Antipolis-Méditerranée.

1989-2011: Directeur de Recherche CNRS (since 2000 DR0 = Exceptional Class) at I3S laboratory, Sophia-Antipolis

1981-1989: Directeur de recherche (DR2 until 1987, then DR1) at LRI (Computer Science), Orsay.

1975-1981: Chargé de recherche, at LRI (Computer Science), Orsay.

1969-1975: Stagiaire then Attaché de recherche, CMS Paris.

### Research Interests

Graph theory, Discrete mathematics, Interconnection networks, Communication protocols, Telecommunications, High speed networks, Optical networks, Radio networks. In these fields, I have published approximately 190 papers, with the majority in journals (more than 100). Most of the papers have been co-authored with researchers from other countries. See my list of publications at <a href="http://www-sop.inria.fr/coati/Publications/Author/BERMOND-JC.shtml">http://www-sop.inria.fr/coati/Publications/Author/BERMOND-JC.shtml</a>

### Research Prizes

In 2010 I win two prizes: the prestigious French award (Grand Prix) from the French Academy of science: Prix de la Fondation d'entreprise EADS (informatique)

(Http://www.academie-sciences.fr/prix/gpmp.htm)

and the Prize for Innovation In Distributed Computing

(http://www.sirocco2010.boun.edu.tr/invited.htm)

### **Professional Activities**

## Research Supervision

I have supervised around 50 PhD theses, 14 thèses d'état, and 8 HDR (habilitations to supervise research). All of my former students are employed in Research Institutes, Universities, or in Industry. Some are in France and others are in foreign countries. I have also supervised a great number of graduate training periods and I have been involved in many examination boards in France and elsewhere.

When I was in Orsay, I founded a research group in Combinatorics which had more than 25 researchers. I was till march 2011, the head of the MASCOTTE project (Algorithms, Simulation, Combinatorics and OpTimization for TElecommunications) which has 10 permanent researchers and around 25 members. MASCOTTE is a joint project between CNRS, INRIA, and the University of Nice-Sophia Antipolis.

#### **Editorial Board Member**

Mathématiques et Sciences Humaines (since 1975)

Journal of Graph Theory (since 1978)

Discrete Mathematics (since 1979)

Discrete Applied Mathematics (since 1994)

Journal of Parallel and Distributed Computing (1984-1993)

Networks (since 1990)

Parallel Processing Letters (since 1991)

Combinatorics, Probability and Computing (since 1991)

Book series of SIAM devoted to Discrete Mathematics and Applications (since 1997)

Journal of Interconnection Networks (since 1999)

Computer Science Reviews (since 2006)

Discrete Mathematics Algorithms and Applications (2009)

Transactions on Network Optimization and Control (2009)

Editor of a Special Issue of Discrete Applied Mathematics (54 articles).

# Conference Organization

I have organized or co-organized many conferences and workshops including the First International Conference on Combinatorics at Orsay in 1976 (co-editor of the proceedings of the conference: 116 papers), the third IWDA (International Workshop on Distributed Algorithms) in 1989 in Nice, the first IWIN (International Workshop on Interconnection Networks) in Marseille (1991), and the International Colloquium on Combinatorics and Number Theory in Tirichiruppali (India) in 1996. I was co-chairman of SIROCCO'99 (Structure Information and Communication Complexity). I have also organized workshops like the AEOLUS workshop on scheduling in march 2007. I have been a member of many program committees.

## **International Cooperations**

I have been a principal investigator for numerous international cooperations including like. Bilateral cooperation with India (Anamalai University) 1993-1996 (supported by CEFIPRA). Bilateral cooperation with Canada (SFU Vancouver) 1993-1996 supported by a PICS (CNRS + MAE) and from 2000 till 2008 Mascotte was a joint team with the network group at S.F.U.

European HCM Project MAP, 1994-1996.

Bilateral cooperation with Israel (Weizmann Institute) 1997-1998 supported by AFIRST

Bilateral cooperation with Italy (Salerno University) 1995-1996

Bilateral cooperation with Greece (Patras University) 1998-1999

Bilateral cooperation with Brazil INRIA-CNPq 1999-2000 and 2005-.

European project FET CRESCCO (Critical REsource Sharing for Cooperation in COmplex Systems) with research groups from Patras (Greece), Salerno (Italy), Roma (Italy), Kiel (Germany) and Geneva (Switzerland) (2002-2005).

European project FET AEOLUS (on global computing) implying 20 teams in Europe (2005-2010).

## **Extended Research Visits**

I have been a visiting researcher in many countries. The following list concentrates on someplaces where I spent some long stays (at least 3 weeks).

SFU, Vancouver: Visiting Fellow at the Centre for Systems Sciences, July 1987 to August 1988 and September 2003 and 2004, september 2006, august 2008

Israel (Weizmann Institute), 1995, 1996, 1997

 $Greece\ (Patras,\ Athens),\ 1998,\ 1999,\ 2000,\ 2002,\ 2003,\ 2004,\ 2005,\ 2006,\ 2007,\ 2008,2010,2012$ 

U.S.A (DIMACS - New Jersey), 1997, 1998, 1998, 1999, 2000, 2001, 2009, 2011.

Brazil (Fortaleza), December 2002, February 2004, November 2005.

## **Administrative Activities**

Chairman of the Computer Science Laboratory LRI at Orsay (URA 410 CNRS-Université de Paris-Sud) 1981 -1983 (110 researchers).

Chairman of the Computer Science Laboratory of ENS-Ulm Paris 1984-1986.

Chairman of the Computer Signal and Systems Laboratory I3S at Sophia Antipolis (URA 1376 CNRS-UNSA) 1990-1994 (140 researchers).

Chairman of the Pole COMRED of the Laboratory I3S at Sophia Antipolis (URA 1376 CNRS-UNSA) 2007-2011 (50 researchers).

Elected member at the "National Committee of CNRS" in the area "Informatique Signaux et Systèmes" 1976-1980. This committee is in charge of the evaluation of the researchers (recruiting and promotion) and the laboratories of CNRS.

Elected President of the "National Committee of CNRS" in the branch "Informatique Signaux et Systèmes" 1983-1987.

Member of various scientific committees: Scientific Council of INRIA, Expert Group at the Ministry MESR, CNU (National Committee of the Universities),...

Director of the Parallelism area of the French program on "Parallel Computing Networks and Distributed Systems" 1993-1994.

Member of the committee of RNRT (National Network Research Telecommunications) 1999-2006. Chairman of the recruiting committee at INRIA Sophia-Antipolis (2006 and 2010)

## Teaching Experience

Courses: I have taught many graduate level courses in the Graduate Studies programs at Orsay, Marseille, and Nice-Sophia Antipolis. I have also taught courses in Engineering Schools (ENST Paris, ESSI Sophia -Antipolis, ENS-Ulm). I have taught courses at the undergraduate level in France, in Cameroon, and in Canada (SFU). The principal topics of the courses were: Graph Theory, Algorithms, Operations Research, Parallel and Distributed Computing, and Interconnection Networks. I have participated in Summer Schools in France, Chile, and Germany.

**Teaching Responsibilities:** Between 1995 and 2000, I was chairman of the graduate studies program "Networks and Distributed Systems" at the University of Nice-Sophia Antipolis. I am since 2009 member of the committee of the international Master in English Ubinet (Ubiquitous Networking and Computing) part of the master IFI of the University of Nice-Sophia Antipolis. I have created in 2012 the international track of the Master 1 in Computer Science and I am among in charge of the recruitments. I am currently in charge at INRIA of the international Attractiveness of INRIA Sophia Antipolis and have organized various meetings.

# **Industrial Collaborations**

I have been responsible for various activities coordinated by the French Ministry of research and industry.

In 1998-2000, and 2001-2003 I was responsible for two contracts on "Conception de résaux embarqués tolérants aux pannes" with the company ALCATEL-SPACE Technologies (based in Toulouse). I was a leader of the RNRT (French National Network of Telecommunications Networks) project PORTO (Planification et Optimisation des Réseaux de Transport Optiques) concerning the use of SDH (Synchronous Digital Hierarchy) on WDM (Wavelength Division Multiplexing) with ALCATEL CIT (Marcoussis) and France Telecom R&D (Issy Les Moulineaux, Lannion, and Sophia-Antipolis). I was also one of the leaders of an RNRT project on "Constellations de Satellites" with the French spatial research Center CNES and research teams from other public and industrial organizations.

I was the leader of a partnership with France Telecom on "Dimensionnement de services SDH pour les entreprises" and responsible for a strong partnership (CRC) with FRANCE TELECOM R&D (2002-2008) (kind of join team).

Since 2009, I am co-responsible of a contract APRF (financed by the province PACA) implying two SME's: 3-Roam and Avisto on backhaul networks.

Recently I was one of the main actors in the proposal of the Laboratory of Excellence UCN@Sophia (User Centric Networking) which has been accepted in February 2012 (budget  $5.5 \text{ M} \in \text{for 8 years}$ ).

I have also done many expertises of activities of PME's for the DRRT (Délégations régionales à la Recherche et la Technologie) (Crédit Impôt Recherche).