

## Curriculum Vitae of Jacques CALMET

This document is not fully maintained since 2004 because of lack of available time. Some more information is available of the web sites. The result is meaningful but not fully complete.

### Personal Data

Birth: June 2, 1941 in Marseilles, France.  
Marital status: Married, 2 children  
Nationality: French.  
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<http://sites.google.com/site/jfcalmet/>

### Education (University of Aix-Marseille, France)

- "**Doctorat-ès-Sciences**" (1970): "*Analyse des diagrammes de Feynman par ordinateur: Application au moment magnétique anomal de l'électron.*"  
Thesis board: M. Froissart, A.C. Hearn, E. de Razaël, J.M. Souriau, A. Visconti.
- "**Doctorat de 3ème Cycle**" (1966): "*Calcul des corrections radiatives jusqu'au sixième ordre inclus pour le modèle  $\lambda\phi^3$ .*"
- "**Licence de physique**", 1964 (10 CES instead of the 6 required).

**Languages:** French (native), English (fluent), German (fluent), Russian (was fluent but fully forgotten).

### Employment

Since 01/08/07: Professor i-R. (retired) Karlsruhe Institute of Technology  
01/08/88 - 31/07/07: Professor of Informatics (computer Algebra), University of Karlsruhe (TH)

1/10/83 - 31/07/87: Research director CNRS, France.  
01/01/73 - 30/09/83: Researcher, CNRS.  
01/04/73 - 31/03/75: Theory division CERN, Geneva, Switzerland (Fellow).  
01/01/65 - 31/12/72: Researcher, CNRS.

While at CNRS, I was attached to two labs. Until 1981, I was with the “Centre de Physique Théorique de Marseille”. Upon coming back from a first stay at Karlsruhe, I did move to a computer science lab in Grenoble: IMAG. I started there my own research group in Computer Algebra before moving in 1984 to the LIFIA lab as vice-director.

### **Extended stays abroad**

15/10/86 - 14/11/86: Institute for Informatics I, University of Karlsruhe.  
01/07/83 - 30/06/84: Dept. of Computer and Information Sciences  
University of Delaware, USA (visiting professor).  
15/02/83 - 15/05/83: Computer Science Dept., University of Wisconsin-Madison, USA  
NSF-CNRS Kooperation.  
01/03/79 - 15/04/81: Institute for Informatics I, University of Karlsruhe.  
01/05/79 - 30/05/79 und 01/08/77 - 30/09/77:  
Ben Gurion University of the Negev, Israel.  
Visiting-Associate Professor.  
01/06/75 - 30/06/75: Hebrew University, Jerusalem, Israel.  
01/04/73 - 31/03/75: CERN, Geneva, Switzerland (Fellow).  
29/09/70 - 28/09/72: University of Utah, Salt Lake City, USA, Post-doc.

Also: 2 weeks stay in China 1987, 4 weeks stay in China 1989 (Shandong Academy of Science, Beijing University of Space and Aeronautics), 3 weeks stay in Brasil 1990 (2 weeks at the University of Brasilia and visit of research institutes in Rio de Janeiro and Sao Paulo). Since 1988 numerous very short stays in different foreign universities. Among them: University Polytechnic of Madrid (UPM), Mars 2004, one week lecture on Artificial Intelligence.

### **Doctoral students**

Current Ph.D. student

- Thilo Mie

Previous Ph.D. students

- Marvin Schneider: [Logical Fibering Based Web Access Management](#), Juli 2007
- Dong Huang: [A Security Gateway for Web Service Protocols](#), Juni 2007
- Yi Yang: [A Framework for Decision Support Systems Adapted to Uncertain Knowledge](#), Juni 2007

- Regine Endsuleit: [Robust and private computations of mobile agent alliances](#), Mai 2007
- Robert Michael Zeier: [Lie-theoretischer Zugang zur Erzeugung unitärer Transformationen auf Quantenrechnern](#), Juli 2006
- Anusch Daemi-Ahwazi: [Entropiebasierte Bewertung von Ontologien](#), Juni 2005
- Björn Grohmann: [Zur Arithmetik in abelschen Zahlkörpern](#), Dezember 2005
- Peter Kullmann: [Wissensrepräsentation und Anfragebearbeitung in einer logikbasierten Mediatorumgebung](#), Juli 2001
- Christoph Zenger: [Indizierte Typen](#), Juli 1998
- Fakler, Winfried: [Algebraische Algorithmen zur Lösung von linearen Differentialgleichungen](#), Juni 1998
- Karsten Homann: [Symbolisches Lösen mathematischer Probleme durch Kooperation algorithmischer und logischer Systeme](#), Juni 1996
- Joachim Schü: [Updates and Query-Processing in a Mediator Architecture](#), Oktober 1995
- Werner Markus Seiler: [Analysis and Application of the Formal Theory of Partial Differential Equations](#), September 1994
- Indra Adiono Tjandra: [Spezifikation mathematischer Rechenstrukturen und Typenpolymorphismen in der Computeralgebra](#), Juli 1993
- Norbert Brändli: [CAD-Datenaustausch - ein formaler Ansatz](#), Oktober 1991
- Felix Ulmer: [Entwurf von Algorithmen zur Berechnung Liouvillescher Lösungen von linearen gewöhnlichen Differentialgleichungen](#), 1991
- Guilherme Bittencourt: [An Architecture for Hybrid Knowledge Representation](#), Januar 1990
- Hubert Comon: [Unification et Disunification. Théorie et Applications](#), März 1988

### **Master thesis/Diplomarbeit/Projets de DEA**

Over 60 master thesis students in France first then in Germany. Among them.

Carsten Schurmann (PhD at Carnegie-Mellon University, Computer Science professor, Yale university, USA)

Denis Lugiez (Professeur d'informatique, Université de Marseille I)

Among the latest master thesis in 2004:

F. Matulic, at the Ricoh company in Japan; Saami Saadoui, at Alcatel Paris. Also some Erasmus students: Carlos Noguero (Madrid; completed), Mark Hammon (Imperial College and Karlsruhe)

Full list (also undergraduate projects) at <http://sites.google.com/site/jfcalmet/>

### **Exchange of students**

- Setting up of double degree programs in Computer Science between the university of Karlsruhe and the ENSIMAG (INPG) in Grenoble and INSA-Lyon and Karlsruhe. German coordinator for these programs which were supported (funded) by the German-French University.
- Coordinator at the Faculty of Computer Science at Karlsruhe of European exchange programs

(CLUSTER, ERASMUS, SOCRATES)

### **Selected international projects**

TACT: Technology Approach to Culture Transmission.

Calculus (EU): integration of computer algebra and automatic theorem proving.

GIFT (EU-NEST): Global Integrability of Field theories – Coordinator

PROBAL: German-Brazilian research project with the university federale de Santa Caterina.

INTAS project with Russia on involutive bases – Coordinator.

Some other projects are listed in <http://iaks-www.ira.uka.de/index.php?id=projects-calmet&L=1>

### **Professional societies**

- ACM ("Association for Computing Machinery") and SIGSAM, SIGPLAN, SIGSOFT, SIGART  
1972-1975: SIGSAM Lecturer  
1979-1981: SIGSAM Secretary  
1981-1986: Editor of the SIGSAM Bulletin.
- IEEE
- AMS (American Mathematical Society)
- AFCET (French Computer Society)  
1978 founder with M. Bergman of Computer Algebra group ("Calcul Formel").
- SMF (Société Mathématique de France)
- AAAI (American Association for Artificial Intelligence)
- GI (Gesellschaft für Informatik)
- Fachgruppe Computer Algebra (GI, DMV, GAMM) - 1988-1991: member of its board.
- SIAM (Society of Industrial and Applied Mathematics)
- Academy of Science of New York
- IMACS
- Association for Automated Reasoning

### **Journals and conferences**

- 1) Applicable Algebra in Engineering, Communication and Computing (Springer Verlag)  
**"Founding Editor-in-Chief". Founder of this journal in 1990.**
- 2) Journal of Symbolic Computation: member of the "Editorial Board" until 1990.

- 3) Referee or reviewer for numerous journals and conferences (earlier in physics then in Mathematics and Computer Science)
- 4) Founder of the conference AISC (Artificial Intelligence and Symbolic Computation) with John Campbell in 1992. This conference is now part of the federation of conferences CICM (Conferences on Intelligent Computer Mathematics).
- 5) Founder of the Rhine Workshop on Computer Algebra (RWCA) in 1994. Retired from this conference in 2006.
- 6) Organization of the first European conference in Computer Algebra EUROCAM 82.

Membership in program or organization committees of the numerous conferences. Some of special meaning are:

- International Colloquia on Advanced Computing Methods in Theoretical Physics, Marseille 1970, 1971, 1973 and Saint Maximin 1977.
- Workshops of the Group "Calcul Formel" of AFCET (Luminy 1978, Grenoble 1978, Lyon 1979, Strasbourg 1980, Poitiers 1981, Marseille 1982).
- SIGSAM '79, Marseilles, France 1979.
- SIGSAM '81, Salt Lake City, USA 1981.
- SEAS/Symbolic Manipulation and Computing, Antwerpen, Belgium 1981.
- EUROCAM '82, Marseille, France 1982. First European conference on Computer Algebra.  
**Conference chairman, Proceedings editor.**
- Workshop on Groebner Bases, Grenoble, France 1983. **Workshop chairman.**
- AAEC-3, Grenoble, France 1985. **Conference chairman, Proceedings editor.**
- International workshop on Computing Tools for Research and Development in Sciences and Engineering, Capri, Italy 1987.
- ISMIS '91 (International Symposium on Methodology of Intelligent System), Charlotte, USA 1991.
- IFIP Working Conference on Programming Environment for High Level Scientific Problem Solving, Karlsruhe, Germany 1991.
- FroCos '96, Munich, Germany 1996
- DISCO '96, Karlsruhe 1996. **Conference chairman, Proceedings editor.**
- 1997: **Program chair** of IMACS-ACA (Hawaii, July).
- GIFT workshop, Lancaster, UK, 2006. Chair and proceedings editor.
- ACA (Applications of Computer Algebra) June 2010 – Albania. Program Chair.

From 1997 on no complete list of participation in program committee of conferences has been maintained. They have been too numerous to keep track of. They cover fields like

computer algebra with ISSAC the main yearly conference, ACA, the main application conference for which I sit in the steering committee, Rhine Workshop in Computer Algebra – RWCA- that I founded in 1994. But also Artificial Intelligence and particularly Artificial Intelligence and Symbolic Computation (AISC) a conference that I founded with John Campbell in the early 1990s and numerous workshops and conferences on multiagent systems. There are a few specialized workshops arising from large projects such as the workshop on over- and under-determined systems of polynomial equations coming from the INTAS project.

## **Publications**

Recent publications can be found on my personal website:

<http://sites.google.com/site/jfcalmet/>

A complete list of older publications is to be found in the file: JC\_Publications 2004