Publications and System Development

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Journals

1. *An algebraic specification of a Pascal Compiler*, ACM SIGPLAN Notices, vol. 18, nb 12, Dec. 83, pages 34–48. Also available as an INRIA report RR-209, May 1983.

2. *Theo: An interactive proof development system*, 'The Scandinavian Journal on Computer Science and Numerical Analysis', BIT, special issue on 'Programming Logic', vol. 32, pages 15-29, 1992. Also available as an INRIA report RR-887, August 1988.

3. *Metatheoretic results for a modal lambda-calcul* (joint work with Pierre Leleu). Journal of Functional and Logic Programming (JFLP), the MIT Press, January 2000.

4. *Primitive Recursion for Higher-Order Abstract Syntax* (joint work with Frank Pfenning and Carsten Schrmann). Theoretical Computer Science (TCS). Vol 266, 1-2, pages 1-57, September 2001. Extended and revised version of the TLCA'97 paper.

5. *Recursion over Objects of Functional Type* (joint work with Pierre Leleu). Special issue of Mathematical Structures in Computer Science (MSCS) on Intuitionistic Modal Logics and Applications, Cambridge Univ. Press, Vol. 11, No. 4, August 2001. Extended and revised version of the TYPES'99 paper.

International Conferences and Workshops

1. *Proof of translation in natural semantics*, Proceedings of the ACM-IEEE conference 'Logic In Computer Science', LICS, Cambridge, Ma, USA, June 1986. Also available as an INRIA report RR-514, April 1986.

2. *A Simple Applicative Language: Mini-ML* (joint work with Dominique Clment, Thierry Despeyroux and Gilles Kahn). Proceedings of the ACM conference 'Lisp and Functional Programming', August 1986. Also available as an INRIA report RR-529, May 1986.

3. *Current experiments in Natural Semantics* (joint work with Thierry Despeyroux), Proceedings of the MCC-INRIA conference on the Resolution of Equations in Algebraic Structures, Lakeway, Texas, May 1987.

4. *Higher-Order Syntax and Induction in Coq* (joint work with Andr Hirschowitz). Proceedings of the int. conf. on Logic Programming and Automated Reasoning, LPAR, Kiev, Ukraine, 16–21 July 1994. LNCS 822, pages 159–173. Also available as an INRIA Research Report RR-2292, INRIA-Sophia-Antipolis, France, June 1994.

5. *Higher-Order Syntax in Coq* (joint work with Amy Felty and Andr Hirschowitz). Proc. of the int. conf. on Typed Lambda Calculi and Applications, TLCA, April 1995, Edinburgh, Scotland. LNCS 902, pages 124–138. Also available as an INRIA Research Report RR-2556, INRIA-Sophia-Antipolis, France, May 1995.

6. *Primitive Recursion for Higher-Order Abstract Syntax* (joint work with Frank Pfenning and Carsten Schrmann). Proc. of the 3rd int. conf. on Typed Lambda Calculi and Applications (TLCA'97), Nancy, France, April 2-4, 1997. LNCS 1210. An extended version is available as Technical Report CMU-CS-96-172 (121 pages).

7. *A modal λ-calcul with iteration and case constructs* (joint work with avec Pierre Leleu). Proc. of the annual TYPES seminar, Kloster Irsee, Allemagne, 27-31 March, 98. LNCS 1657, 1999.

8. *Primitive recursion for higher-order abstract syntax - dependant types* (en collaboration avec Pierre Leleu). Int. Workshop on Intuitionistic Modal Logics and Applications (IMLA), LICS affiliated workshop, June 30 - July 12, 1999: int. Federated Conference on Logic (FLOC), Trento, Italy.

9. *A Higher-order specification of the pi-calculus.* Proc. of the IFIP International Conference on Theoretical Computer Science, IFIP TCS'2000, Sendai, Japan, August 17-19, 2000.

National Conferences and Workshops:

1. *Un système de méta-compilation basé sur la notion de type abstrait* (joint work with Marie-Claude Gaudel). Proceedings of the 10th Spring School 'Compilation et Interprétation', Barèges, France, 1982 (in french).

2. *A higher-order specification of the pi-calculus.* The Modelisation and Verification seminar, Marseille, Dec 1998.

Lecture Notes

1. *Smantique Naturelle: Spcifications et Preuves.* Lecture notes of a graduate course in the "DEA" "Mathmatiques Discrtes et Fondements de l'Informatique" (MDFI), Marseille, 1995-1999 (80 pages, in french). INRIA research report RR-3359, February 1998.

Misc.

1. *Une sémantique formelle du P-Code basée sur les types abstraits algébriques*, INRIA report RR-158, Sept. 1982 (in french).

2. *Natural Semantics on the Computer* (joint work with Dominique Clément, Thierry Despeyroux, Laurent Hascoet and G. Kahn). INRIA report RR-416, June 1985.

3. *Theo: An interactive proof development system. User's manual*, INRIA Technical Report RT-116, February 1990.

Invited Conferences:

1. *Specifications and proofs of properties of programming languages.* "The Eighth International Colloquium on Numerical Analysis and Computer Sciences with Applications", Plovdiv, Bulgaria, August 13-17, 99.

Development of Systems

1. *Théo:* Development of the Theo system from January 1988 to December 1991. This prototype has been distributed to the Centaur users interested in proof construction (ap. 10 sites at that time).