

# Liste de publications

Hélène Kirchner

Centre de Recherche INRIA Bordeaux - Sud-Ouest  
Bâtiment A29 351, Cours de la Libération 33405 Talence  
E-Mail: Helene.Kirchner@inria.fr

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## Thèses

- C. Kirchner, H. Kirchner:  
"Contribution à la résolution d'équations dans les algèbres libres et les variétés équationnelles d'algèbres"  
Thèse de 3eme cycle, Université de Nancy I  
Mars 1982
- H. Kirchner:  
"Preuves par complétion dans les variétés d'algèbres"  
Thèse de Doctorat d'Etat en Informatique, Université de Nancy I  
Juin 1985

## Edition d'actes et issues spéciales

1. "Algebraic and Logic Programming"  
Lecture Notes in Computer Science, vol.463, 1990.  
H. Kirchner, W. Wechler (Eds).
2. Numéro spécial de Theoretical Computer Science:  
"Selected papers of the 2nd International Conference on Algebraic and Logic Programming, Nancy, France, October 1-3, 1990"  
Theoretical Computer Science, Logic, semantics and theory of programming, volume 105, number 1.  
H. Kirchner and W. Wechler (Eds.)
3. "Proceedings of the 3rd International Conference on Algebraic and Logic Programming, Volterra (Italy)"  
Lecture Notes in Computer Science, vol.632,  
H. Kirchner, and G. Levi (Eds), Springer Verlag, 1992.
4. Numéro spécial de Annals of Mathematics and Artificial Intelligence:  
"Theorem proving and logic Programming"  
Vol.8, No.III-IV, 1993.  
H. Kirchner and J.-L. Lassez (Eds.)

5. Numéro spécial de Applicable Algebra in Engineering, Communication and Computation,  
“Algebraic and Logic Programming”  
Vol.5, No.3/4, 1994  
H. Kirchner and G. Levi (Eds.)
6. “Trees in Algebra and Programming - CAAP 96”  
Proc. 21st International Colloquium , Linköping, Sweden, April 1996. Lecture Notes in Computer Science, vol.1059, H. Kirchner (Ed.) Springer Verlag, 1996.
7. Numéro spécial de Theoretical Computer Science:  
“Special Issue on the 21st Colloquium on Trees in Algebra and Programming, CAAP’96”  
Theoretical Computer Science B, Logic, semantics and theory of programming, volume 190, number 1-2, january 1998.  
H. Kirchner (Ed.)
8. “WRLA’98, Proceedings of the 2nd international workshop on rewriting logic and its applications”  
Electronic Notes in Theoretical Computer Science, vol.15,  
C. Kirchner, H. Kirchner (eds), 1998. (<http://www.elsevier.nl/locate/entcs>)
9. “Automated Deduction - CADE-15”  
Proc. 15th International Conference on Automated Deduction, Lindau, Germany, July 1998. Lecture Notes in Artificial Intelligence, vol.1421, C. Kirchner and H. Kirchner (Ed.) 1998.
10. “Algebraic System Specification and Developement: Survey and Annotated Bibliography, 2nd edition”  
Monographs of the Bremen Institute of Safe Systems, vol.3, Shaker Verlag,  
M. Cerioli, M. Gogolla, H. Kirchner, B. Krieg-Brückner, Z. Qian, M. Wolf (eds.), 1999.
11. “Frontiers of Combining Systems FroCoS’2000” Lecture Notes in Artificial Intelligence, vol.1794,  
H. Kirchner and C. Ringeissen (eds), Springer Verlag, 2000.
12. Numéro spécial de Annals of Mathematics and Artificial Intelligence:  
“Strategies in Automated Deduction”  
B.Gramlich, H.Kirchner and F.Pfenning(Eds.), vol.29 (1-4), February 2001.
13. “Algebraic Methodology and Software Technology” Lecture Notes in Computer Science, vol.2422, H.Kirchner, C.Ringeissen (eds), Springer-Verlag, 2002.
14. “Rewriting, Computation and Proof (Essays Dedicated to Jean-Pierre Jouannaud on the Occasion of His 60th Birthday)” Lecture Notes in Computer Science, vol.4600, H.Comon, C.Kirchner, H.Kirchner (eds), Springer-Verlag, 2007.

## Chapitres de livres

1. H. Kirchner:  
“Some extensions of rewriting”

dans *Term rewriting*, H.Comon & JP.Jouannaud (eds.), Lecture Notes in Computer Science 909, pp.54–73. Proc. Ecole de Printemps d’Informatique Théorique sur la Réécriture (1993).

2. H. Kirchner:  
“On the Use of Constraints in Automated Deduction”  
dans *Constraint programming: Basic and Trends*, A.Podelski (ed.), Lecture Notes in Computer Science 910, pp.128–146. Proc. Ecole de Printemps d’Informatique Théorique sur les Contraintes (1994).
3. C. Kirchner, H. Kirchner, M. Vittek:  
“Designing Constraint Logic Programming Languages using Computational Systems”  
dans *Principles and Practice of Constraint Programming. The Newport Papers*, MIT Press, P. Van Hentenryck, V. Saraswat (ed.), pp.131-158, 1995.
4. H. Kirchner:  
“Orderings in Automated Theorem Proving”  
in *Proceedings of Symposia in Applied Mathematics, Mathematical Aspects of Artificial Intelligence*, vol.55, American Mathematical Society, F. Hoffman (ed.), pp.55-95, 1998.
5. H. Kirchner:  
“Term Rewriting”  
in *Algebraic Foundations of Systems Specifications*, IFIP State-of-the-Art Reports, E. Astesiano, H.-J. Kreowski, B. Krieg-Brückner (eds.), ch.9, pp.273–320, Springer, 1999.
6. C. Kirchner, H. Kirchner, A. Megrelis:  
“OBJ for OBJ”,  
in *Software Engineering with OBJ: Algebraic Specification in Action* ,J.A. Goguen, G. Malcolm (eds), ch.6, pp.307–330, Kluwer, Boston, 2000.
7. C. Kirchner, F. Kirchner, H. Kirchner:  
“Strategic Computations and Deductions”,  
in *Festchrift in honor of Peter Andrews*, Studies in Logic and the Foundations of Mathematics, Elsevier. 2008. To appear.

## Revues

1. J.-P. Jouannaud, H. Kirchner:  
“Construction d’un plus petit ordre de simplification stable par instantiation”  
RAIRO Informatique théorique, vol. 18, no. 3, pp.191-207, 1984.
2. J.-P. Jouannaud, H. Kirchner:  
“Completion of a set of rules modulo a set of equations”  
SIAM Journal of Computing, vol.15, no.4, pp. 1155-1194, 1986.
3. C. Kirchner, H. Kirchner:  
“REVEUR-3: Implementation of a general completion procedure parameterized by

built-in theories and strategies”  
Science of Computer Programming, vol.20, no.8, pp.69-86, 1986.

4. H. Kirchner:  
“Schematization of infinite sets of rewrite rules generated by divergent completion processes”  
Theoretical Computer Science, vol.67, no.2-3, pp.303-332, 1989.
5. I. Gnaedig and C. Kirchner and H. Kirchner:  
“Equational Completion in Order Sorted Algebras”  
Theoretical Computer Science, vol.72, pp.169-202, 1990.
6. C. Kirchner, H. Kirchner, M. Rusinowitch:  
“Deduction with symbolic constraints”  
Papier invité dans la Revue de l’Intelligence Artificielle, vol.4 (3), pp.9-52, 1990.
7. M. Hermann, C. Kirchner, H. Kirchner:  
“Implementations of Term Rewriting Systems”  
Computer Journal, Bristish Computer Society, vol.34(1), pp.20-33, 1991.
8. J.-P. Jouannaud, C. Kirchner, H. Kirchner, A. Megrelis:  
“Programming with equalities, subsorts, overloading and parameterization in OJB”  
Journal of Logic Programming, vol.12(3), pp.257-280, 1992.
9. J. Hsiang, H. Kirchner, P. Lescanne, M. Rusinowitch:  
“The term rewriting approach to automated theorem proving”  
Journal of Logic Programming, vol.14(1 & 2), pp.71-100, 1992.
10. H. Kirchner, C. Ringeissen:  
“Combining Symbolic Constraint Solvers on Algebraic Domains”  
Journal of Symbolic Computations, vol.18(2), pp.113-155, 1994.
11. C. Hintermeier, C. Kirchner, H. Kirchner:  
“Dynamically-Typed Computations for Order-Sorted Equational Presentations”  
Journal of Symbolic Computations, vol.25(4), pp.455-526, 1998.
12. P. Borovanský, C. Kirchner, H. Kirchner, C.Ringeissen:  
“Rewriting with strategies in ELAN: a functional semantics”  
in *International Journal of Foundations of Computer Science*, 12(1):69-98, World Scientific Publishing Company, 2001.
13. H. Kirchner, P.E. Moreau:  
“Promoting rewriting to a programming language: A compiler for non-deterministic rewrite programs in associative-commutative theories”.  
J.Functional Programming, 11(2):207-251, March 2001.
14. H. Kirchner:  
“Combining assisted and automated deduction”.  
Annals of Mathematics and Artificial Intelligence. Tenth Aniversary, volume 28 (1-4), pp.21-27, 2000.

15. H. Kirchner, P.D. Mosses: “Algebraic Specifications, Higher-Order Types, and Set-Theoretic Models”  
Journal of Logic and Computation, 11(3):451-479, June 2001.
16. P.Borovansky, C.Kirchner, H.Kirchner, P.E.Moreau:  
“ELAN from a rewriting logic point of view”.  
Theoretical Computer Science, 285(2), 2002.
17. E. Astesiano, M. Bidoit, H. Kirchner, B. Krieg-Brückner, P.D. Mosses, D. Sanella: “CASL: The Common Algebraic Specification Language”  
J.L.Fiadero (ed.). Special issue of Theoretical Computer Science on Current trends in Algebraic Development Techniques. Elsevier, Theoretical Computer Science, 286(2), september 2002, pp.153-196.
18. Q.H. Nguyen, Cl. Kirchner, H. Kirchner: “External rewriting for skeptical proof assistants” Journal of automated Reasoning, 29(3-4), 2002, pp.309-336
19. I. Gnaedig, H. Kirchner: “Termination of rewriting under strategies”. Accepted for publication in 2007. To appear in ACM Transactions Of Computational Logic.
20. C. Kirchner, H. Kirchner, F. Nahon:  
“Narrowing Based Inductive Proof Search”  
Invited paper at the workshop in Honor of Harald Ganzinger, Saarbrücken, Germany, 3-4 june 2005. Submitted to Journal of Automated Reasoning.
21. F. Nahon, C. Kirchner, H. Kirchner, P. Brauner:  
“Inductive Proof Search Modulo”  
Accepted for publication in Annals of Mathematics and Artificial Intelligence. 2008.
22. Duc-Khanh Tran, C. Ringeissen, S. Ranise, H. Kirchner :  
“Combination of Convex Theories: Modularity, Deduction Completeness, and Explanation” Submitted to Journal of Symbolic Computation. 2008.

## Dossiers

- D. Galmiche, H. Kirchner:  
“Les langages fonctionnels et logiques”  
Courrier du CNRS, Dossiers Scientifiques: La recherche en Informatique, février 1993.
- Notes in ERCIM News.
- Lettres du LORIA (éditeur en chef, 2001-2006)
- C. Kirchner, H. Kirchner:  
“Sécurité informatique. Peut-on se fier au numérique ?” Les cahiers de l’INRIA, La Recherche - mai 2008 - N° 419.

## Actes de Conférences Internationales

1. J.-P. Jouannaud, C. Kirchner, H. Kirchner:  
“Incremental unification in equational theories”  
Proc. of the Allerton conference, 1982.
2. J.-P. Jouannaud, C. Kirchner, H. Kirchner:  
“Incremental Construction of Unification Algorithms in Equational Theories”  
Proc. International Colloquium on Automata, Languages and Programming, Barcelone, 1983,  
Lecture Notes in Computer Science, vol.154, pp.361-373.
3. J.-P. Jouannaud, H. Kirchner, J.-L. Rémy :  
“Church-Rosser Properties of Weakly Terminating Term Rewriting Systems”  
Proc. 8th International Joint Conference on Artificial Intelligence, Karlsruhe, RFA, pp. 909-915, 1983
4. H. Kirchner:  
“A general inductive completion algorithm and application to abstract data types”  
Proc. 7th International Conference on Automated Deduction, Napa Valley (California, USA), 1984,  
Lecture Notes in Computer Science, vol.170, pp.282-302.
5. J.-P. Jouannaud, H. Kirchner:  
“Completion of a set of rules modulo a set of equations”  
Proc. 11th ACM Symposium on Principles of Programming Languages  
Salt Lake City (Utah, USA), 1984.
6. C. Kirchner, H. Kirchner:  
“Implementation of a general completion procedure parameterized by built-in theories and strategies”  
Proc. EUROCAL Conference, Linz (Austria), 1985,  
Lecture Notes in Computer Science, vol.204.
7. P. Rety, C. Kirchner, H. Kirchner, P. Lescanne:  
“NARROWER: a new algorithm for unification and its application to Logic Programming”  
Proc. 1st Conference on Rewriting Techniques and Applications, Dijon (France), 1985  
Lecture Notes in Computer Science, vol.202, pp.141-157.
8. H. Kirchner:  
“Schematization of infinite sets of rewrite rules. Application to the divergence of completion processes”,  
Proc. Second Conference on Rewriting Techniques and Applications, Bordeaux (France), 1987,  
Lecture Notes in Computer Science, vol.256, pp.180-191.
9. J.A. Goguen, C. Kirchner, H. Kirchner, A. Megrelis, J. Meseguer, T. Winkler:  
“An Introduction to OBJ-3”,  
Proc. 1st Workshop on Conditional Term Rewriting Systems, Orsay (France), 1988,  
Lecture Notes in Computer Science, vol.308, pp.258-263.

10. I. Gnaedig, C. Kirchner, H. Kirchner:  
 “Equational Completion in Order-sorted Algebras. Extended Abstract”,  
 Proc. 13th Colloquium on Trees in Algebras and Programming, Nancy, (France),  
 1988,  
 Lecture Notes in Computer Science, vol.299, pp.165-184.
11. C. Kirchner, H. Kirchner, J. Meseguer:  
 “Operational semantics of OBJ-3”,  
 Proc. ICALP’88, Tampere (Finlande),  
 Lecture Notes in Computer Science, vol.317, pp.287-301.
12. J.-P. Jouannaud, C. Kirchner, H. Kirchner, A. Megrelis:  
 “OBJ: Programming with equalities, subsorts, overloading and parameterization”  
 Proc. 1st International Workshop on Algebraic and Logic Programming, 1988,  
 Akademie-Verlag, vol.49, pp.41-52.
13. C. Kirchner, H. Kirchner:  
 “Constrained Equational Reasoning”  
 Proc. ACM-SIGSAM 1989 International Symposium on Symbolic and Algebraic  
 Computation, 1989, ACM Press, pp.382-389.
14. M. Hermann, H. Kirchner:  
 “Meta-rule Synthesis from Crossed Rewrite Systems”  
 Proc. 2nd Workshop on Conditional and Typed Rewrite Systems, Lecture Notes in  
 Computer Science, vol.516, pp.143-154, 1991.
15. H. Kirchner:  
 “Proofs in parameterized specifications”  
 Proc. Conference on Rewriting Techniques and Applications, Lecture Notes in Com-  
 puter Science, vol.488, pp.174-187, 1991.
16. H. Kirchner, C. Ringeissen:  
 “A constraint solver in finite algebras and its combination with unification algo-  
 rithms”  
 Proc. Joint International Conference and Symposium on Logic Programming,  
 K. Apt (ed.), MIT Press, pp.225-239, 1992.
17. C. Kirchner, H. Kirchner, M. Vittek: “Implementing Computational Systems with  
 Constraints”  
 Proceedings of the first Workshop on Principles and Practice of Constraint Program-  
 ming, Providence (R.I., USA), P.Kanellakis, J.-L.Lassez, W.Saraswat (eds.), Brown  
 University, pp. 166-175, 1993.
18. C. Hintermeier, C. Kirchner, H. Kirchner:  
 “Dynamically-Typed Computations for Order-Sorted Equational Presentations”  
 Proc. 21st International Colloquium on Automata, Languages and Programming  
 (ICALP 94), S. Abiteboul and E. Shamir (eds.) Lecture Notes in Computer Science,  
 vol.820, pp.450-461, 1994.
19. H. Kirchner, C. Ringeissen:  
 “Incremental constraint solving by narrowing in combined algebraic domains”

Proc. 11th International Conference on Logic Programming (ICLP'94), P. Van Hentenryck (ed.), MIT Press, pp.617-631, 1994.

20. H. Kirchner, P.-E. Moreau:  
“Prototyping completion with constraints using computational systems” (System Presentation)  
Proc. RTA'95, J.Hsiang (ed.), Lecture Notes in Computer Science 914, pp.438–443.
21. C. Hintermeier, C. Kirchner, H. Kirchner:  
“Sort Inheritance for Order-Sorted Equational Presentations”  
“Recent Trends in Data Types Specification. 10th Workshop on Specification of Abstract Data Types joint with the 5th COMPASS Workshop S.Margherita, Italy, May/June 1994. Selected papers.” E. Astesiano, G. Reggio, A. Tarlecki (eds.), Lecture Notes in Computer Science vol.906, pp.319-335, april 1995, Springer Verlag.
22. C. Hintermeier, H. Kirchner, P. Mosses:  
“ $R^n$ - and  $G^n$ -logics”  
Proc. HOA'95, “Higher-Order Algebra, Logic, and Term Rewriting”, G.Dowek, J.Heering, K.Meinke, and B.Möller (eds.), Lecture Notes in Computer Science, vol.1074, pp.90–108, Springer Verlag, 1996.
23. C. Hintermeier, H. Kirchner, P. Mosses:  
“Combining Algebraic and Set Theoretic Specifications”  
“Recent Trends in Data Type Specification”, Proc. 11th Workshop on Specification of Abstract Data Types joint with the 9th general COMPASS workshop. Oslo, Norway, September 1995. Selected papers.  
M.Haveraaen, O.Owe and O-J.Dahl (eds.), Lecture Notes in Computer Science, vol.1130, pp.255–273, Springer Verlag, 1996.
24. P. Borovansky, C. Kirchner, H. Kirchner, P.E. Moreau, M. Vittek:  
“ELAN: A logical framework based on computational systems”  
Proceedings of the first international workshop on rewriting logic, Asilomar (California), Electronic Notes in Theoretical Computer Science, vol.4, pp.35–50, J. Meseguer (ed), 1996. Report CRIN : 96-R-188.  
<http://www.elsevier.nl/locate/entcs>
25. P. Borovansky, C. Kirchner, H. Kirchner:  
“Controlling rewriting by rewriting”  
Proceedings of the first international workshop on rewriting logic, Asilomar (California), Electronic Notes in Theoretical Computer Science, vol.4, pp.168–188, J. Meseguer (ed), 1996. Report CRIN : 96-R-189.
26. H. Kirchner, P.E. Moreau:  
“A reflective extension of ELAN”  
Proceedings of the first international workshop on rewriting logic, Asilomar (California), Electronic Notes in Theoretical Computer Science, vol.4, pp.148–167, J. Meseguer (ed), 1996. Report CRIN : 96-R-191.
27. P. Borovanský, C. Kirchner, H. Kirchner:  
“Rewriting as a Unified Specification Tool for Logic and Control: The ELAN language”

- Proceedings of International Workshop on Theory and Practice of Algebraic Specifications ASF+SDF 97, Springer-Verlag, Electronic Workshops in Computing Series, World Scientific. Amsterdam, 1997. <http://www.springer.co.uk/ewic/workshops/ASFSDF97/>
28. P. Borovanský, H. Kirchner:  
“Strategies of ELAN: meta-interpretation and partial evaluation”  
Proceedings of International Workshop on Theory and Practice of Algebraic Specifications ASF+SDF 97, Springer-Verlag, Electronic Workshops in Computing Series, World Scientific. Amsterdam, 1997. <http://www.springer.co.uk/ewic/workshops/ASFSDF97/>
  29. P.E. Moreau, H. Kirchner:  
“Compilation Techniques for Associative-Commutative Normalisation”, Proceedings of International Workshop on Theory and Practice of Algebraic Specifications ASF+SDF 97, Springer-Verlag, Electronic Workshops in Computing Series, World Scientific. Amsterdam, 1997. <http://www.springer.co.uk/ewic/workshops/ASFSDF97/>
  30. P. Borovanský, C. Kirchner, H. Kirchner:  
“A functional view of rewriting and strategies for a semantics of ELAN”  
in *The Third Fuji International Symposium on Functional and Logic Programming*, World Scientific, M. Sato and Y. Toyama (ed), pp.143-67, 1998.
  31. P.E. Moreau, H. Kirchner:  
“A compiler for Rewrite Programs in Associative-Commutative Theories”, in Principles of Declarative Programming, Proceedings of International Conference PLILP/ALP’98. Springer-Verlag, Lecture Notes in Computer Science, vol.1492, pp.230–249, 1998.
  32. P. Borovansky, C. Kirchner, H. Kirchner, P.E. Moreau, C. Ringeissen:  
“An overview of ELAN”  
Proceedings of WRLA’98, the 2nd international workshop on rewriting logic and its applications, Pont-à-Mousson (France), Electronic Notes in Theoretical Computer Science, vol.15, pp.0, C. Kirchner, H. Kirchner (eds), 1998. <http://www.elsevier.nl/locate/entcs/volum>
  33. H. Kirchner, P.E. Moreau:  
“Non-deterministic computations in ELAN”  
Recent Developements in Algebraic Specification Techniques, Proc. 13th WADT’98, Selected Papers, J.L.Fiadeiro (ed), Lecture Notes in Computer Science, vol.1589, pp.168–182, Springer Verlag, 1999.
  34. H. Kirchner, P.D. Mosses:  
“Algebraic Specifications, Higher-Order Types, and Set-Theoretic Models”  
Proceedings of AMAST’98 – 7th International Conference on Algebraic Methodology and Software Technology, A.Haeberer (ed), Lecture Notes in Computer Science, vol.1548, pp.373–388, Springer Verlag, 1999.
  35. H. Kirchner:  
“ELAN (tutoriel invité)”  
Proceedings of JFPLC’99 – Journées Francophones de Programmation Logique et programmation par Contraintes, F.Fages (ed), Hermes Science Publications, pp.241–248, 1999.

36. H. Kirchner:  
 “CASL Tools”  
 CD ROM FM’99, Springer Verlag.
37. H. Dubois, H. Kirchner:  
 “Rule Based Programming with Constraints and Strategies”.  
 in New Trends in Constraints, Proceedings of joint ERCIM/Compulog Net Workshop, Paphos (Cyprus), K.Apt, A.Kakas, E.Monfroy, F.Rossi (eds), Lecture Notes in Artificial Intelligence, vol.1865, pp.274–297, Springer Verlag, 2000.
38. H. Dubois, H. Kirchner:  
 “Objects, constraints, rules and strategies in ELAN”  
 Proceedings of the Workshop AMiLP’00 (Algebraic Methods in Language Processing), Iowa City (USA), mai 2000. (Invited talk).
39. H. Kirchner, I. Gnaedig:  
 “Termination and normalisation under strategies – Proofs in ELAN”  
 Proceedings of the 3rd International Workshop on Rewriting Logic and its Applications, Kanazawa (Japan), september 18-20, 2000. pp 93-115. (Invited talk). Electronic Notes on Theoretical Computer Science, Number 36, Elsevier.
40. O. Fissoire, I. Gnaedig, H. Kirchner:  
 “Termination of rewriting with local strategies”,  
 Proceedings of the International Workshop STRATEGIES 2001-Selected Papers, Electronic Notes on Theoretical Computer Science, Number 58(2), pp. 35-54, Elsevier.
41. O. Fissoire, I. Gnaedig, H. Kirchner:  
 “System presentation. CARIBOO: An Introduction Based Proof Tool for Termination with Strategies”  
 Proceedings of the Fourth International Conference on Principles and Practice of Declarative Programming (PPDP’02), ACM, 2002
42. O. Fissoire, I. Gnaedig, H. Kirchner:  
 “Outermost ground termination”  
 Proceedings of WRLA’2002, 4th international workshop on rewriting logic and its applications, Pisa, Italy. Electronic Notes on Theoretical Computer Science 71 (16 pages).
43. E. Deplagne, C. Kirchner, H. Kirchner, Q.H. Nguyen:  
 “Proof search and proof check for equational and inductive theorems”  
 Proc. 19th International Conference on Automated Deduction, Miami, USA, July 2003 Lecture Notes in Artificial Intelligence 2741, pp.297-316, Springer-Verlag.
44. O. Bournez, G-M. Côme, V. Conraud, H. Kirchner, L. Ibănescu:  
 “Automated Generation of Kinetic Chemical Mechanisms Using Rewriting”  
 Proc. International Conference on Computational Science ICCS’2003, Melbourne, 2-4 june, Lecture Notes in Computer Science 2659, pp.367-376, 2003.
45. O. Bournez, G-M. Côme, V. Conraud, H. Kirchner, L. Ibănescu:  
 “A Rule-Based Approach for Automated Generation of Kinetic Chemical Mechanisms”

Proc.14th International Conference on Rewriting Techniques and Applications RTA'03,  
Lecture Notes in Computer Science 2706,pp.30-45, june 2003.

46. O. Fissoire, I. Gnaedig, H. Kirchner :  
“Simplification and termination of strategies in rule-based languages”  
Proceedings of the Fifth International Conference on Principles and Practice of Declarative Programming (PPDP'03) – Uppsala, Sweden, ACM, pp.124-135, 2003.
47. O. Fissoire, I. Gnaedig, H. Kirchner :  
“A proof of weak termination providing the right way to terminate”  
Proceedings of the First International Conference on Theoretical Aspects of Computing ICTAC'2004– Guiyang, China, 20-14 september 2004. Lecture Notes in Computer Science 3407,pp.356-371.
48. C. Kirchner, H. Kirchner:  
“Rule-based programming and proving: the ELAN experience outcomes”  
Proceedings of the Ninth Asian Computing Science Conference ASIAN'04, Chiang Mai, Thailand, 8-10 december 2004. Invited paper. Lecture Notes in Computer Science 3371, pp.363-379.
49. O. Bournez, L. Ibănescu, H. Kirchner:  
“From Chemical Rules to Term Rewriting”  
Proceedings of the 6th International Workshop on Rule-Based Programming, Federated Conference on Rewriting, Deduction and Programming, Nara, Japan, 19-23 April 2005. Electronic Notes on Theoretical Computer Science 147(1), pp.113-134.
50. C. Kirchner, H. Kirchner, A. Santana:  
“Anchoring modularity in HTML”  
Proceedings of the 1st International Workshop on Automated Specification and Verification of Web Sites, Valencia, Spain, 14-15 March 2005. Electronic Notes on Theoretical Computer Science, 157(2), pp.133-146, May 2006.
51. H. Kirchner, S. Ranise, C. Ringeissen, D. Khanh Tran:  
“On Superposition-Based Satisfiability Procedures and their Combination”. Proceedings of the Second International Conference on Theoretical Aspects of Computing ICTAC'2005– Hanoi, Vietnam, 17-21 october 2005. Lecture Notes in Computer Science 3722, pp.594-608.
52. O. Andrei, L. Ibănescu, H. Kirchner:  
“Non-intrusive Formal Methods and Strategic Programming for a Chemical Application”  
J. Goguen Festschrift, K. Futatsugi et al. (Eds.), Lecture Notes in Computer Science 4060, pp.194-215, 2006.
53. I. Gnaedig, H. Kirchner :  
“Computing constructor forms with non-terminating rewrite programs”  
Proceedings of the International Conference on Principles and Practice of Declarative Programming (PPDP'06) – Venice, Italy, july 2006, ACM Sigplan, pp.121-132.
54. H.Kirchner, S.Ranise, C.Ringeissen, D-K.Tran :  
“Automatic Combinability of Rewriting-Based Satisfiability Procedures”

Proc. of the 13th Int. Conference on Logic for Programming, Artificial Intelligence, and Reasoning (LPAR'06) – Phnom Penh, Cambodia, november 2006, Lecture Notes in Artificial Intelligence 4246, pp.542-556.

55. D.J.Dougherty, C.Kirchner, H.Kirchner, A.Santana de Oliveira :  
“Modular Access Control via Strategic Rewriting”  
Proceedings of the 12th European Symposium On Research In Computer Security (ESORICS 2007) – Dresden, Germany, September 24-26, 2007, Lecture Notes in Computer Science.
56. O. Andrei, H. Kirchner:  
“A Rewriting Calculus for Multigraphs with Ports”  
Proceedings of the 8th International Workshop on Rule-Based Programming, Federated Conference on Rewriting, Deduction and Programming, Paris, France, 25-29 June 2007. Electronic Notes on Theoretical Computer Science.
57. I.Gnaedig, H.Kirchner:  
“Narrowing, Abstraction and Constraints for Proving Properties of Reduction Relations”  
in *Rewriting, Computation and Proof (Essays Dedicated to Jean-Pierre Jouannaud on the Occasion of His 60th Birthday)*, H.Comon, C.Kirchner, H.Kirchner (eds), Lecture Notes in Computer Science 4600, pp.44-67, 2007.
58. F.Nahon, C.Kirchner, H.Kirchner:  
“Inductive Proof Search Modulo”  
International Workshop on First-Order Theorem Proving (FTP’07), Liverpool, UK, September 12-13 2007.
59. O.Andrei, H.Kirchner:  
“Graph Rewriting and Strategies for Modeleing Biochemical Networks”  
Workshop on Natural Computing and Applications (NCA’2007), Timisoara, Romania, September 26-29, 2007.
60. A.Santana de Oliveira, E.Ke Wang, C.Kirchner, H.Kirchner:  
“Weaving Rewrite-Based Access Control Policies”  
5th ACM Workshop on Formal Methods in Security Engineering:From Specifications to Code, Alexandria, VA, USA, November 2, 2007.
61. O. Andrei, H. Kirchner:  
“A Higher-Order Graph Calculus for Autonomic Computing”  
in *Graph Theory, Computational Intelligence and Thought* Conference in honor of Martin Golumbic, october 2008. Lecture Notes in Computer Science.
62. C.Kirchner, H.Kirchner, A.Santana de Oliveira:  
“Analysis of Rewrite-Based Access Control Policies”  
3rd International Workshop on Security and Rewriting Techniques SecReT’08, july 2008, to appear in ENTCS.

## Workshops avec actes à diffusion restreinte

1. H. Kirchner, L. Vigneron:  
“Deduction with constraints for theory reasoning; completeness and simplification problems”  
Proc. of the CADE 12 workshop: Theory Reasoning in Automated Deduction, 1994.
2. P. Borovansky, C. Kirchner, H. Kirchner:  
“Strategies and rewriting in ELAN”  
Proc. of the CADE-14 workshop: Strategies in Automated Deduction, Townsville, Australia, 1997. Report CRIN 97-R-126.
3. H. Dubois, H. Kirchner:  
“Actions and Plans in ELAN”  
Proceedings of the CADE-14 workshop: Strategies in Automated Deduction, Lin-dau, Germany, pp.35-45, 1998, <http://www.loria.fr/publications/1998/98-R-275/98-R-275.ps>
4. H. Kirchner, C. Ringeissen:  
“Executing CASL Equational Specifications with the ELAN rewrite Engine”.  
Report LORIA 99-R-278.
5. H.Dubois, H.Kirchner:  
“Object Programming in a Rule-Based Language with Strategies”.  
Proceedings of Workshop on Multiparadigm Programming with OO Languages - ECOOP’02, June 2002,p Malaga, Spain.
6. H.Dubois, H.Kirchner:  
“An algebraic semantics for objects in a rule-based language”.  
Proceedings of 16th International Workshop on Algebraic Development Techniques - WADT’02, September 2002, Frauenchiemsee, Germany. Report LORIA A02-R-444
7. O.Fissore, I.Gnaedig, H.Kirchner:  
“Cariboo : a multi-strategy termination proof tool based on induction”. (System description)  
WST’03, 6th International Workshop on Termination, part of RPD’03, Federated Conference on Rewriting, Deduction and Programming, june 2003.  
Report LORIA : A03-R-436
8. M.El Habib, C.Kirchner, H.Kirchner, J-Y.Marion, S.Merz:  
“The QSL platform at LORIA”.  
First QPQ Workshop on Deductive Software Components, CADE-19, Miami, july 2003. Report LORIA : A03-R-539
9. O. Andrei, H. Kirchner :  
“A Biochemical Calculus Based on Strategic Graph Rewriting” Short Communica-tions (5 p.), Algebraic Biology 2008.
10. O. Andrei, H. Kirchner:  
“A Higher-Order Graph Calculus for Autonomic Computing”  
Proceedings of TFIT 2008.

## **Editions d'actes de workshops**

1. Actes du Workshop IJCAI-93:  
“Automated theorem proving”  
Université de Chambéry, août 1993,  
H. Kirchner (Ed.)
2. Proceedings of the CADE’97 Workshop on “Strategies in Automated Deduction”,  
Townsville, Australia, july 1997. B. Gramlich, H. Kirchner (Eds.) Also report  
LORIA 97-R-287.
3. Proceedings of the FLOC’99 Workshop on “Strategies in Automated Deduction”,  
Trento(Italy), july 1999.  
B. Gramlich, H. Kirchner, F. Pfenning (Eds.)

## **Notes de cours, manuels, survols, rapports de contrats**

1. F. Orejas, H. Ehrig, P. Pepper, H. Ehrich, H. Ganzinger, R. Burstall, D. Sanella, E. Astesiano, P. Lescanne, J.-L. Rémy, H. Kirchner, H. Partsch, M.-C. Gaudel, J.-P. Jouannaud, Y. Kodratoff, M. Broy, M. Wirsing:  
“A Comprehensive Algebraic Approach to System and Development”,  
ESPRIT Basic Research Action, 1989.
2. C. Kirchner, H. Kirchner:  
“Rewriting, Solving, Proving”  
Notes de cours.
3. Claude Kirchner, Hélène Kirchner, Marian Vittek:  
”ELAN V 1.17 User Manual”.  
Inria Lorraine & Crin, Nancy (France), first edition, November 1995.
4. Peter Borovanský, Claude Kirchner, Hélène Kirchner, Pierre-Etienne Moreau, Marian Vittek:  
”ELAN V 3.0 User Manual”.  
Inria Lorraine & Loria, Nancy (France), second edition, Janvier 1998.
5. P. Borovanský, H. Cirstea, H. Dubois, C. Kirchner, H. Kirchner, P-E. Moreau, C. Ringeissen, M. Vittek:  
”ELAN V 3.3 User Manual”.  
Inria Lorraine & Loria, Nancy (France), third edition, Décembre 1998.
6. Kirchner, Hélène:  
“Prototyping and verification with rules and strategies”.  
Invited talk, Cyber Assist International Symposium, Tokyo, Japan, 2001 Report  
LORIA : A01-R-447.
7. Kirchner, Hélène:  
“Algebraic Specifications, Higher-Order Types and Set-Theoretic Models”.  
Invited talk, Winter Workshop in Logics, Types and Rewriting, Edinburgh, UK,  
2000. Report LORIA : A00-R-493.

8. D.Duval, H.Kirchner, C.Lair:  
“Subtypes and Subsorts in Overloaded Specifications.”  
Report LMC-IMAG RR 1058 I (septembre 2003).
9. Ibanescu, Liliana and Bournez, Olivier and Kirchner, Hélène and Côme, Guy-Marie and Conraud, Valérie :  
“Projet GasEl. Elaboration d'un logiciel de génération de mécanismes détaillés d'oxydation et de combustion de molécules d'hydrocarbures. Rapport No 1”, 2001, Report LORIA A01-R-457
10. Ibanescu, Liliana and Bournez, Olivier and Kirchner, Hélène and Côme, Guy-Marie and Conraud, Valérie :  
“Projet GasEl. Elaboration d'un logiciel de génération de mécanismes détaillés d'oxydation et de combustion de molécules d'hydrocarbures. Rapport No 2”, 2002, Report LORIA A02-R-559
11. Ibanescu, Liliana and Bournez, Olivier and Kirchner, Hélène and Côme, Guy-Marie and Scacchi, Gérard and Conraud, Valérie : “Projet GasEl. Elaboration d'un logiciel de génération de mécanismes détaillés d'oxydation et de combustion de molécules d'hydrocarbures. Rapport No 3”, 2002, Report LORIA A02-R-560
12. Ibanescu, Liliana and Bournez, Olivier and Kirchner, Hélène and Côme, Guy-Marie and Scacchi, Gérard and Conraud, Valérie : “Projet GasEl. Elaboration d'un logiciel de génération de mécanismes détaillés d'oxydation et de combustion de molécules d'hydrocarbures. Rapport No 4”, 2003, Report LORIA A03-R-540
13. Ibanescu, Liliana and Kirchner, Hélène and Bournez, Olivier and Côme, Guy-Marie and Scacchi, Gérard and Conraud, Valérie : “Projet GasEl. Elaboration d'un logiciel de génération de mécanismes détaillés d'oxydation et de combustion de molécules d'hydrocarbures. Rapport No 5”, 2003, Report LORIA A03-R-541