

Bibliography

- [1] M. Abadi, L. Cardelli, P.-L. Curien, and J.-J. Lévy. Explicit substitutions. *Journal of Functional Programming*, 1(4):375–416, 1991.
- [2] T. Altenkirch. *Constructions, inductive types and strong normalisation*. PhD thesis, Laboratory for the Foundations of Computer Science, University of Edinburgh, 1994.
- [3] A. Asperti and S. Guerrini. *The Optimal Implementation of Functional Programming Languages*. Cambridge University Press, 1998.
- [4] H.P. Barendregt. *The Lambda Calculus: Its Syntax and Semantics*, volume 103 of *Studies in Logic and the Foundations of Mathematics*. North-Holland, 1984.
- [5] S. Baro and F. Maurel. The qv and qv_k calculi : name capture and control. PPS prépublication 16, Université Denis Diderot, 2003.
- [6] B. Barras. *Auto-validation d'un système de preuves avec familles inductives*. PhD thesis, Université Paris 7, November 1999.
- [7] B. Barras and B. Werner. Coq in Coq. <http://pauillac.inria/~barras/coqincoq.ps.gz>, 1997.
- [8] G. Barthe, M. Ruys, and H. Barendregt. A two-level approach towards lean proof-checking. In *Proceedings of Types '95*, volume 1128 of *Lecture Notes in Computer Science*, pages 16–35. Springer, 1995.
- [9] Z. Benaïssa, Briaud, P. D., Lescanne, and J. Rouyer-Degli. λv , a calculus of explicit substitutions which preserves strong normalisation. *Journal of Functional Programming*, 6(5):699–722, 1996.
- [10] L.S. van Benthem Jutting, J. McKinna, and R. Pollack. Checking algorithms for Pure Type Systems. In H. Barendregt and T. Nipkow, editors, *Proceedings of the International Workshop on Types for Proofs and Programs*, volume 806 of *Lecture Notes in Computer Science*, pages 19–61, Nijmegen, The Netherlands, 1994. Springer-Verlag.
- [11] K.J. Berkling. A symmetric complement to the lambda-calculus. Interner Bericht ISF-76-7, GMD, D-5205, St. Augustin 1, West Germany, 1976.

- [12] M. Bezem, D. Hendriks, and H. de Nivelle. Automated proof construction in type theory using resolution. <http://www.phil.uu.nl/~hendriks/coq/blinc>, 2002. Coq source, tools and sample applications.
- [13] M. Bezem, D. Hendriks, and H. de Nivelle. Automated proof construction in type theory using resolution. In D. McAllester, editor, *Automated Deduction – CADE-17*, volume 1831 of *Lecture Notes in Artificial Intelligence*, pages 148–163. Springer-Verlag, 2000.
- [14] M. Bezem, D. Hendriks, and H. de Nivelle. Automated proof construction in type theory using resolution. *Journal of Automated Reasoning*, 29(3–4):253–275, 2002.
- [15] R.S. Bird and R.A. Paterson. De Bruijn notation as a nested datatype. *Journal of Functional Programming*, 9(1):77–91, 1999.
- [16] S.C.C. Blom. *Term Graph Rewriting, syntax and semantics*. PhD thesis, Vrije Universiteit Amsterdam, 2001.
- [17] E. Bonelli. *Substitutions explicites et réécriture de termes*. PhD thesis, Université Paris XI, 2001.
- [18] S. Boutin. Using reflection to build efficient and certified decision procedures. In M. Abadi and T. Ito, editors, *Theoretical Aspects of Computer Software*, volume 1281 of *Lecture Notes in Computer Science*, pages 515–529. Springer-Verlag, 1997.
- [19] N.G. de Bruijn. Lambda calculus notation with nameless dummies, a tool for automatic formula manipulation. *Indagationes Mathematicae*, 34:381–392, 1972.
- [20] L. Cardelli and A.D. Gordon. Mobile ambients. In M. Nivat, editor, *FOSACS '98*, volume 1378 of *LNCS*, pages 140–155. Springer, 1998.
- [21] C. Chen and H. Xi. Meta-programming through typeful code representation. <http://www.cs.bu.edu/~hwxi/>, 2002.
- [22] A. Church. A set of postulates for the foundation of logic. *Annals of Mathematics*, 33:346–366, 1932.
- [23] H. Comon, M. Dauchet, R. Gilleron, F. Jacquemard, D. Lugiez, S. Tison, and M. Tommasi. Tree automata techniques and applications. <http://www.grappa.univ-lille3.fr/tata>, 1997. October, 1st 2002.
- [24] P. Coppola. *On the Complexity of Optimal Reduction of Functional Programming Languages*. PhD thesis, Università degli Studi di Udine, 2002.
- [25] R. David and B. Guillaume. A λ -calculus with explicit weakening and explicit substitution. *Mathematical Structures for Computer Science*, 11:169–206, 2001.

- [26] R. Di Cosmo, D. Kesner, and E. Polonovski. Proof nets and explicit substitutions. In *FOSSACS '00*, volume 1784 of *LNCS*, pages 63–81. Springer, 2000.
- [27] M.J. Gabbay and A.M. Pitts. A new approach to abstract syntax involving binders. In *LICS '99*, pages 214–224. IEEE Computer Society, 1999.
- [28] A.D. Gordon and T.F. Melham. Five axioms of alpha-conversion. In J. von Wright, J. Grundy, and J. Harrison, editors, *TPHOLs '96*, volume 1125 of *LNCS*, pages 173–190. Springer, 1996.
- [29] The Omega Group. The OMEGA System. <http://www.ags.uni-sb.de/~omega>. Mathematical assistant.
- [30] B. Günzel. Logik und das Auswahlaxiom. Diplomarbeit, Fakultät für Mathematik und Informatik der Ludwig-Maximilians-Universität München, 2000.
- [31] D. Hendriks. Clausification of first-order formulae, representation & correctness in type theory. Master's thesis, Department of Philosophy, Utrecht University, 1998.
- [32] D. Hendriks. Proof reflection in Coq. *Journal of Automated Reasoning*, 29(3):277–307, 2002.
- [33] D. Hendriks. Proof reflection in Coq. <http://www.phil.uu.nl/~hendriks/coq/prfx>, 2002. Coq source.
- [34] D. Hendriks and V. van Oostrom. λ . In F. Baader, editor, *Automated Deduction – CADE-19*, volume 2741 of *Lecture Notes in Artificial Intelligence*, pages 136–150. Springer-Verlag, 2003.
- [35] D. Hendriks and V. van Oostrom. Adbmal-calculus. <http://preprints.phil.uu.nl/lgpr>, 2003. Coq source.
- [36] J.R. Hindley. *The Church–Rosser property and a result in combinatory logic*. PhD thesis, University of Newcastle-upon-Tyne, 1964.
- [37] M. Hollenberg and C.F.M Vermeulen. Counting variables in a dynamic setting. *Journal of Logic and Computation*, 6(5):725–744, 1996.
- [38] X. Huang. Translating machine-generated resolution proofs into ND-proofs at the assertion level. In *Proceedings of PRICAI-96*, pages 399–410, 1996.
- [39] G. Huet. Confluent reductions: Abstract properties and applications to term rewriting systems. *Journal of the ACM*, 27(4):797–821, 1980.
- [40] G. Huet. Residual theory in lambda-calculus: a formal development. *Journal of Functional Programming*, 4(3):371–394, July 1994.

- [41] J. Hurd. Integrating gandalf and hol. In *Proceedings TPHOL's 99*, volume 1690 of *Lecture Notes in Computer Science*, pages 311–321, 1999.
- [42] F. Joachimski and M. Matthes. Short proofs of normalization for the simply-typed λ -calculus, permutative conversions and gödel's T. *Archive for Mathematical Logic*, 42(1):59–87, 2003.
- [43] S. Kahrs. Context rewriting. In M. Rusinowitch and J.-L. Rémy, editors, *CTRS '92*, volume 656 of *LNCS*, pages 21–35. Springer, 1993.
- [44] Z. Khasidashvili, M. Ogawa, and V. van Oostrom. Uniform normalisation beyond orthogonality. In A. Middeldorp, editor, *RTA '01*, LNCS, pages 122–136. Springer, 2001.
- [45] Y. Lafont. Interaction nets. In *POPL '90*, pages 95–108. ACM Press, 1990.
- [46] Y. Lafont. From proof-nets to interaction nets. In J.-Y. Girard, Y. Lafont, and L. Regnier, editors, *Advances in Linear Logic*, volume 222 of *London Mathematical Society Lecture Note Series*, pages 225–248. Cambridge University Press, 1995.
- [47] J. Lamping. An algorithm for optimal lambda calculus reduction. In *POPL '90*, pages 16–30. ACM Press, 1990.
- [48] J.-J. Lévy. *Réductions correctes et optimales dans le λ -calcul*. Thèse de doctorat d'état, Université Paris VII, 1978.
- [49] W. McCune and O. Shumsky. IVY: A preprocessor and proof checker for first-order logic. Technical Report Preprint ANL/MCS-P775-0899, Argonne National Laboratory, Argonne IL, 1999.
- [50] J. McKinna and R. Pollack. Pure Type Systems formalized. In M. Bezem and J.F. Groote, editors, *Proceedings 1st International Conference on Typed Lambda Calculi and Applications, TLCA '93, Utrecht, The Netherlands, 16–18 March 1993*, volume 664, pages 289–305. Springer-Verlag, Berlin, 1993.
- [51] J. McKinna and R. Pollack. Some lambda calculus and type theory formalized. *Journal of Automated Reasoning*, 23(3–4):373–409, 1999.
- [52] G. Nadathur and D. Miller. Higher-order logic programming. In D. Gabbay, C. Hogger, and J. Robinson, editors, *Handbook of Logic in Artificial Intelligence*, volume 5, pages 499–590, Oxford, 1998. Clarendon Press.
- [53] Q.-H. Nguyen. Certifying term rewriting proofs in ELAN. *Electronic Notes in Theoretical Computer Science*, 59(4), 2001.
- [54] H. de Nivelle. Bliksem, a first-order, resolution-based theorem prover. <http://www.mpi-sb.mpg.de/~nivelle/programs/bliksem/index.html>.
- [55] J. Parrow. The fusion calculus: Expressiveness and symmetry in mobile processes. In *LICS '98*, pages 176–185. IEEE Computer Society, 1998.

- [56] R.A. Paterson. Non-deterministic lambda-calculus: A core for integrated languages. In *Declarative Programming*, SassBachwalden, 1991. Springer.
- [57] H. Persson. *Type Theory and the Integrated Logic of Programs*. PhD thesis, Chalmers University of Technology and University of Göteborg, 1996.
- [58] F. Pfenning. Analytic and non-analytic proofs. In *Proceedings CADE 7*, volume 170 of *Lecture Notes in Computer Science*, pages 394–413. Springer-Verlag, 1984.
- [59] J. van de Pol. *Termination of Higher-order Rewrite Systems*. PhD thesis, Utrecht University, Department of Philosophy, Utrecht, 1996.
- [60] R. Pollack. How to believe a machine-checked proof. In G. Sambin and J. Smith, editors, *Twenty-Five Years of Constructive Type Theory*. Oxford University Press, 1998.
- [61] D. Prawitz. Ideas and results in proof theory. In J.E. Fenstad, editor, *Proceedings of the Scandinavian Logic Symposium*, pages 235–307, Amsterdam, 1971. North-Holland.
- [62] D.E. Schroer. *The Church–Rosser Theorem*. PhD thesis, Cornell University, 1965.
- [63] H. Schwichtenberg. Logic and the axiom of choice. In M. Boffa, D. van Dalen, and K. McAloon, editors, *Logic Colloquium '78*, pages 351–356. North-Holland, 1979.
- [64] J. Smith and T. Tammet. Optimized encodings of fragments of type theory in first-order logic. In *Proceedings Types '95*, volume 1158 of *Lecture Notes in Computer Science*, pages 265–287. Springer-Verlag, 1995.
- [65] G. Sutcliffe. The CADE-16 ATP system competition. *Journal of Automated Reasoning*, 24:371–396, 2000.
- [66] The Coq Development Team. *The Coq Proof Assistant Reference Manual, version 7.2*. INRIA-Rocquencourt, December 2001. <http://coq.inria.fr/doc-eng.html>.
- [67] Terese. *Term Rewriting Systems*. Cambridge University Press, 2003.
- [68] R. Vestergaard and J. Brotherston. A formalised first-order confluence proof for the λ -calculus using one-sorted variable names. In A. Middeldorp, editor, *RTA '01*, LNCS, pages 306–321. Springer, 2001.
- [69] B. Werner. *Une Theorie des Constructions Inductives*. PhD thesis, Université Paris, 1994.

