

Références bibliographiques

- [AB] K. ADJAMAGBO et P. BOURY, *A resultant criterion and formula for the inversion of a polynomial map in two variables*, prépublication ENPC, CERMA, Noisy-le-Grand, 1989.
- [AM] S. S. ABHYANKAR et T.-T. MOH, *Embeddings of the Line in the Plane*, J. Reine Angew. Math. 276, 149–166, 1975.
- [BA] N. BOURBAKI, *Algèbre*, chap. 4–7, Masson, Paris, 1981.
- [BCW] H. BASS, E. H. CONNELL et D. WRIGHT, *The Jacobian Conjecture: Reduction of Degree and Formal Expansion of the Inverse*, Bull. A.M.S., vol. 7, n° 2, 287–330, 1982.
- [Bel] R. BELLMAN et K.J. ÅSTRÖM, *On structural identifiability*, Math. Biosci., 7, 329–339, 1970.
- [Bu1] B. BUCHBERGER, *A Criterion for Detecting Unnecessary Reductions in the Construction of Groebner Bases*, Actes de EUROSAM79, Marseille, Lect. Notes in Comp. Science 72, 2–31, Springer Verlag, Juin 1979.
- [Bu2] B. BUCHBERGER, *Groebner Bases: an Algorithmic Method in Polynomial Ideal Theory*, Multi-dimensional Systems Theory, N. K. Bose éditeur, Reidel, 184–232, 1985.
- [Car1] G. CARRA'-FERRO, *Gröbner bases and differential ideals*, actes de AAEECC5, Menorca, Spain, 129–140, Springer Verlag, Juin 1987.
- [Car2] G. CARRA'-FERRO, *Kolchin Schemes*, Journal of Pure and Applied Algebra 63, 13–27, North-Holland, 1990.
- [Car3] G. CARRA'-FERRO, *On Term-Orderings and Ranking*, Informal session, MEGA'90.
- [Cas] F. CASTRO, *Théorème de division pour les opérateurs différentiels et calcul des multiplicités*, thèse de troisième cycle, Paris VII, Oct. 1984.
- [CT] P. CONTI et C. TRAVERSO, *Computing the Conductor of an Integral Extension*, preprint, 1989.
- [De] R. DESNOS, *Corps et biens*, N.R.F., Paris, 1930.
- [DD] C. DICRESCENZO et D. DUVAL, *Algebraic Computation on Algebraic Numbers*, Computers and Computing, Chenin et al. éd., 54–61, Masson et Wiley, 1985.
- [Di] S. DIOP, *Théorie de l'élimination et principe du modèle interne en automatique*, thèse de doctorat en science, Univ. Paris Sud, 1989.
- [Du] D. DUVAL, *Computation with Algebraic Numbers: the D5 Method*, soumis à J. Symb. Comp., 1989.
- [E] A. VAN DEN ESSEN, *A criterion to decide if a polynomial map is invertible and to compute the inverse*, report 8653, Catholic University Nijmegen, Pays-Bas, 1986.
- [FGLM] J.C. FAUGÈRE, P. GIANNI, D. LAZARD and T. MORA, *Efficient computation of zero-dimensional standard bases by change of ordering*, preprint 1988.
- [FGM] N. FITCHAS, A. GALLIGO, J. MORGENSTERN, *Precise sequential and parallel complexity for quantifier elimination over algebraically closed fields*, à paraître dans Journal of Pure and Applied Algebra, 1987.
- [Fl] M. FLIESS, *Automatique et corps différentiels*, Forum Math., 1, 1989.

- [Gal] A. GALLIGO, *Somme algorithmic questions on ideals of differential operators*, actes d'EUROCAL'85, vol. II, 413–421, Lect. Notes in Comp. Science, Springer, 1985.
- [God] L. GODEAUX, *Les transformations birationnelles du plan*, Gauthier-Villars, Paris, 1927.
- [Ha] R. HARTSHORNE, *Algebraic Geometry*, Springer, 1977.
- [Hu] G. HUET, *An Algorithm to Generate the Basis of Solutions to Homogeneous Linear Diophantine Equations*, Information Processing Letters, 7, 3, 144–147, 1978.
- [Ja] M. JANET, *Systèmes d'équations aux dérivées partielles*, J. de Math., 8^e série, tome III, 1920.
- [Jo] J.-P. JOUANOLOU, *Monoïdes*, publ. IRMA 297/P-162, Strasbourg, 1984.
- [Ju] H.W.E. JUNG, *Über ganze birationale Transformationen des Ebene*, J. Reine Angew. Math., 184, 161–174, 1942.
- [KM] D. KAPUR et K. MADLENER, *A Completion Procedure for Computing a Canonical Basis of a k -Subalgebra*, Computers and Math., E. Kaltofen et S. M. Watt éditeurs, Springer, 1989.
- [Ko1] E. R. KOLCHIN, *Galois Theory of Differential Fields*, Amer. J. Math., 75, 753–824, 1953.
- [Ko2] E. R. KOLCHIN, *Differential Algebra and Algebraic Groups*, Academic Press, New-York, 1973.
- [Kol] J. KOLLÁR, *Sharp Effective Nullstellensatz*, J. Am. Math. Soc., 1, 963–975, 1988.
- [Ku] W. van der KULK, *On Polynomial Rings in two Variables*, Nieuw. Arch. Wiskunde 1, 33–41, 1953.
- [La] D. LAZARD, *A New Method for Solving algebraic systems of positive dimension*, prépublication du LITP, Paris VII, n° 89-77, conférence invitée à AAEECC'7, Toulouse, 1989.
- [Le] Y. LECOURTIER, *Propriétés structurelles de modèles : études théoriques, tests formels, applications à la catalyse hétérogène*, Thèse de Doctorat ès Sciences, Université Paris-Sud, 1985.
- [LLW] Y. LECOURTIER, F. LAMNABHI-LAGUARRIGUE, et E. WALTER, *A Method to Prove that Non-Linear Models can be Unidentifiable*, actes de 26th Conference on Decision and Control, Los Angeles, CA, 2144–2145, Décembre 1987.
- [Lev] H. LEVI, *On the structure of differential polynomials and on their theory of ideals*, Transactions of the A.M.S., vol 51, 326–365, 1942.
- [M] Yu. I. MANIN, *Rational Surfaces over Perfect Fields II*, Math. USSR-Sb., 1, 141–168, 1967.
- [MM] E. W. MAYR et A. MEYER, *The Complexity of the Word Problem for Commutative Semigroup and Polynomials Ideals*, Advances in Math., 46, 305–329, 1982.
- [Moh] T.-T. MOH, *On the Jacobian conjecture and the configuration of roots*, Journal für Math., 340, 140–212, 1982.
- [Mol] H. M. MOELER, *A reduction strategy for the taylor resolution*, actes de EUROCAL'85, Linz, 1985.
- [N] M. NAGATA, *On the Automorphism Group of $k[x, y]$* , Lect. Math. Kyoto University, 1972.
- [O1] F. OLLIVIER, *Inversibility of rational mappings and structural identifiability in automatics*, actes de ISSAC'89, Portland Oregon, 43–53, ACM Press, 1989.
- [O2] F. OLLIVIER, *Canonical bases: relations with standard bases, finiteness conditions and application to tame automorphisms*, à paraître dans les actes de MEGA'90, Castiglioncello, Birkhauser, 1990.
- [O3] F. OLLIVIER, *Standard Bases of differential ideals*, soumis à AAEECC'8, Tôkyô, 1990.
- [Po1] J.-F. POMMARET, *Systems of partial differential equations and Lie pseudogroups*, Gordon and Breach, New-York, 1978.
- [Po2] J.-F. POMMARET, *Differential Galois theory*, Gordon and Breach, New-York, 1983.
- [Po3] J.-F. POMMARET, *Lie pseudogroups ans mechanics*, Gordon and Breach, New-York, 1988.
- [Po4] J.-F. POMMARET, *Effective methods for systems of algebraic partial differential equations*, présenté à MEGA'90, Castiglioncello, 1990.
- [Ra] A. RAKSANYI, *Utilisation du calcul formel pour l'étude des systèmes d'équations polynomiales (Applications en modélisation)*, thèse de troisième cycle, Université Paris-Dauphine, 1986.
- [Riq] RIQUIER, *Les systèmes d'équations aux dérivées partielles*, Gauthier-Villars, Paris, 1910.
- [Ri1] J.F. RITT, *Differential Equations from the Algebraic Standpoint*, Amer. Math. Soc. Colloq. Publ., vol. 14, A.M.S., New-York, 1932.

- [Ri2] J.F. RITT, *Differential algebra*, Amer. Math. Soc. Colloq. Publ., vol. 33, A.M.S., New-York, 1950.
- [Ro1] L. ROBBIANO, *Terms ordering on the polynomial ring*, actes de EUROCAL'85, vol. II, 513–517, 1985.
- [Ro2] L. ROBBIANO, *On the Theory of Graded Structures*, J. Symb. Comp. 2, 1986.
- [RS] L. ROBBIANO et M. SWEEDLER, *Subalgebra Bases*, preprint, Cornell Univ., 1989.
- [Scr] R. S. SUTOR éd., *The Scratchpad Computer Algebra System Interactive Environment Users Guide*, Computer Algebra Group, Math. Sciences Dep., IBM Research Division, Thomas J. Watson Research Center, Yorktown Heights, 25 Octobre 1989.
- [Se] B. SEGRE, *Forme differenziali e loro integrali*, vol. II, Docet, Rome, 1956.
- [Sei] A. SEIDENBERG, *An elimination theory for differential algebra*, Univ. California Publications in math., (N.S.), 3, n°2, 31–65, 1956.
- [SS] D SHANNON et M. SWEEDLER, *Using Groebner Bases to Determine Algebra Membership, Split Surjective Algebra Homomorphisms and Determine Birational Equivalence*, preprint 1987, paru dans J. Symb. Comp., 6, 2–3.
- [Sw] M. SWEEDLER, *Ideal bases and valuation rings*, preprint, 1988.
- [Th] J. M. THOMAS, *Systems and Roots*, W. Byrd Press, Richmond (Virginia), 1962.
- [V] V. VYSOTSKIĬ, *Nerv*, (en russe), Sovremennik, Moskva, 1981.
- [Wa1] E. WALTER, *Identifiability of State Space Models*, Lect. notes in Biomath. n° 46, Springer 1982.
- [Wa2] Collectif : DISTEFANO, LAMNABHI-LAGUARRIGUE, LECOURTIER, RAKSANYI, VAJDA, WALTER, etc. . . , *Identifiability of parametric models*, E. Walter éditeur, Pergamon Press, Oxford, 1987.
- [WL] E. WALTER et Y. LECOURTIER, *Global approaches to identifiability testing for linear and non-linear state space models*, Mathematics and computers in Simulation, XXIV, 472–482, 1982.
- [Wu1] WU W.-T., *A Zero Structure Theorem for Polynomial Equation Solving*, Math.-Mechanization Research Preprints 1, 2–12, Academia Sinica, Beijing, 1987.
- [Wu1] WU W.-T., *A Zero Structure Theorem for Polynomial Equation Solving and its applications*, actes de ISSAC'88, Rome, Italie, Springer Verlag, 1988.
- [ZS] O. ZARISKI et P. SAMUEL, *Commutative Algebra*, vol I, Springer Verlag, 1958.