

University of Groningen

## Algebraic aspects of linear differential and difference equations

Hendriks, Peter Anne

**IMPORTANT NOTE:** You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

*Document Version*

Publisher's PDF, also known as Version of record

*Publication date:*

1996

[Link to publication in University of Groningen/UMCG research database](#)

*Citation for published version (APA):*

Hendriks, P. A. (1996). *Algebraic aspects of linear differential and difference equations*. s.n.

### Copyright

Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

The publication may also be distributed here under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license. More information can be found on the University of Groningen website: <https://www.rug.nl/library/open-access/self-archiving-pure/taverne-amendment>.

### Take-down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Downloaded from the University of Groningen/UMCG research database (Pure): <http://www.rug.nl/research/portal>. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.

# Bibliography

- [Bat67] P.M. Batchelder, An introduction to linear difference equations, Dover Publications, New York (1967).
- [BBH88] F. Beukers, W.D. Brownawell, G. Heckman, Siegel normality, *Ann. of Math.* 127 (1988), 279 - 308.
- [BD79] Baldassarri, F. and Dwork, B. Differential equations with algebraic solutions. *American Journal of Mathematics* **101**(1) (1979)., 42–76.
- [Ber90] D. Bertrand, Extensions de  $D$ -modules et groupes de Galois différentiels,  $p$ -adic analysis, Lecture Notes in Mathematics 1454, Springer-Verlag, Berlin, Heidelberg, New York 1990.
- [Bli17] Blichfeldt, H.F. *Finite collineation groups*. Chicago: University of Chicago Press 1917.
- [Bro92] Bronstein, M. Linear ordinary differential equations; breaking through the order 2 barrier. *Proceedings of ISSAC 1992*. Berkeley: ACM Press.
- [DM82] P. Deligne, J. Milne, Tannakian categories, *Lect. Notes in Math.* **900**, 101-228, 1982.
- [Gre69] M.J. Greenberg, Lectures on forms in many variables, W.A. Benjamin, Inc., New York, 1969.
- [Hen96] P.A. Hendriks, An algorithm for determining the difference Galois group for second order linear difference equations, To appear in *J. Symb. Comp.*
- [HP93] Hendriks, P. A., van der Put, M. A rationality result for Kovacic's algorithm. *Proceedings of ISSAC 1993*. Berkeley: ACM Press.
- [HP95] P.A. Hendriks, M. van der Put, Galois action on solutions of differential equations, *J. Symb. Comp.* 19 (1995), 559-576
- [Kap57] I. Kaplansky, An introduction to differential algebra, Hermann, Paris, 1957.

- [Kol68] E.R. Kolchin, Algebraic groups and algebraic independence, *Amer. J. Math.* 90 (1968), 1151-1164.
- [Kol73] E.R. Kolchin, *Differential algebra and algebraic groups*, Academic Press, New York, London, 1973.
- [Kov86] J.J. Kovacic, An algorithm for solving second order linear differential equations, *J. Symb. Comp.* 2 (1986), 3-43.
- [Lev75] Levelt, A.H.M. Jordan decomposition for a class of singular differential operators. *Arkiv för matematik*, **12**(1) (1975), 1-27.
- [Lev90] A.H.M. Levelt, Differential Galois theory and tensor products, *Indag. Math.* 1 No. 4 (1990), 439-449.
- [Pet92] M. Petkovsek, Hypergeometric solutions of linear recurrences with polynomial coefficients, *J. Symb. Comp.* 14 (1992), 243-264.
- [PS96] M. van der Put, M.F. Singer, Galois theory of difference equations, in preparation.
- [Put95] M. van der Put, Differential equations in characteristic  $p$ , *Compositio mathematica* **97** (1995), 227-251
- [Ren75] G. Renault, *Algebre non commutative*, Gautiers-Villars, Paris, 1975.
- [Ser64] J-P.Serre, *Cohomologie Galoisienne*, Lecture Notes in Mathematics, Springer-Verlag, New York, 1964.
- [Ser68] J-P.Serre, *Corps locaux*, Hermann, Paris, 1968.
- [Shi89] A.B. Shidlovskii, *Transcendental numbers*, de Gruyter Studies in Mathematics 12, Walter de Gruyter, Berlin, New York, 1989.
- [Sin89] M.F. Singer, An outline of differential Galois theory, *Computer Algebra and Differential Equations*, E. Tournier (editor), Academic Press, 1990.
- [SU93] Singer, M.F. and Ulmer, F. Liouvillian and algebraic solutions of second and third order linear differential equations. *Journal of Symbolic Computation* **16**(1) (1993), 9-13.