

Objektyp: **ReferenceList**

Zeitschrift: **L'Enseignement Mathématique**

Band (Jahr): **29 (1983)**

Heft 1-2: **L'ENSEIGNEMENT MATHÉMATIQUE**

PDF erstellt am: **08.08.2024**

Nutzungsbedingungen

Die ETH-Bibliothek ist Anbieterin der digitalisierten Zeitschriften. Sie besitzt keine Urheberrechte an den Inhalten der Zeitschriften. Die Rechte liegen in der Regel bei den Herausgebern.

Die auf der Plattform e-periodica veröffentlichten Dokumente stehen für nicht-kommerzielle Zwecke in Lehre und Forschung sowie für die private Nutzung frei zur Verfügung. Einzelne Dateien oder Ausdrucke aus diesem Angebot können zusammen mit diesen Nutzungsbedingungen und den korrekten Herkunftsbezeichnungen weitergegeben werden.

Das Veröffentlichen von Bildern in Print- und Online-Publikationen ist nur mit vorheriger Genehmigung der Rechteinhaber erlaubt. Die systematische Speicherung von Teilen des elektronischen Angebots auf anderen Servern bedarf ebenfalls des schriftlichen Einverständnisses der Rechteinhaber.

Haftungsausschluss

Alle Angaben erfolgen ohne Gewähr für Vollständigkeit oder Richtigkeit. Es wird keine Haftung übernommen für Schäden durch die Verwendung von Informationen aus diesem Online-Angebot oder durch das Fehlen von Informationen. Dies gilt auch für Inhalte Dritter, die über dieses Angebot zugänglich sind.

11.11. *Remarks.* It is conceivable that the family (11.2) contains all the families of representations one needs to prove the Snapper etc. result by means of deformation arguments. Quite generally we would like to pose the question which representations occur in this family and investigate universal families (for continuous families) of homomorphisms of representations from some fixed representation space into another.

REFERENCES

- [1] BERNSTEIN, I. N., I. M. GELFAND and S. I. GELFAND. Schubert-cells and cohomology of the spaces G/P . *Russian Math. Surv.* 28, 3 (1978), 1-26.
- [2] BRYLAWSKI, T. The Lattice of Integer Partitions, *Discrete Math.* 6 (1973), 201-219.
- [3] GERSTENHABER, M. On Dominance and Varieties of Commuting Matrices, *Ann. Math.* 73 (1961), 324-348.
- [4] GROTHENDIECK, A. Sur la classification des fibrés holomorphes sur la sphère de Riemann. *Amer. J. Math.* 79 (1957), 121-138.
- [5] HARPER, L. and G.-C. ROTA. Matching Theory: An Introduction. In: P. Ney (ed.), *Advances in Probability, Vol. 1*, Marcel Dekker, 1971, 171-215.
- [6] HAZEWINKEL, M. and T. VORST. On the Snapper, Liebler-Vitale, Lam Theorem on Permutation Representations of the Symmetric Groups. To appear: *J. Pure and Appl. Algebra*.
- [7] HAZEWINKEL, M. and C. MARTIN. Representations of S_n and the Geometry of Linear Systems. *Conference on Decision and Control*, Albuquerque 1980.
- [8] HESSELINK, W. Singularities in the Nilpotent Scheme of a classical Group. *Trans. Amer. Math. Soc.* 222 (1976), 1-32.
- [9] KALMAN, R. E. Kronecker Invariants and Feedback (+ errata). In: L. Weiss (ed.), *Ordinary Differential Equations*, Acad. Press, 1972, 459-471.
- [10] KERBER, A. The Diagram Lattice as Structural Principle in Mathematics. In: P. Kramers, A. Rieckers (eds.), *Group Theoretical Methods in Physics* (Tübingen, 1977), *Lect. Notes in Physics* 79, Springer, 1978, 53-71.
- [11] KRAFT, H. P. Letter to M. Hazewinkel, June 2, 1980 (this material will be presented at the Torun conference in September 1980).

- [12] LAM, T. Y. Young Diagrams, Schur Functions, the Gale-Ryser Theorem and a Conjecture of Snapper. *J. Pure and Appl. Algebra* 10 (1977), 81-94.
- [13] LIEBLER, R. A. and M. R. Vitale. Ordering the Partition Characters of the Symmetric Group. *J. of Algebra* 25 (1973), 487-489.
- [14] MARTIN, C. and R. HERMANN. Applications of Algebraic geometry to System Theory: the McMillan Degree and Kronecker Indices of Transfer Functions as Topological and Holomorphic System Invariants. *SIAM J. Control Opt.* 16 (1978), 743.
- [15] MEAD, A., E. RUCH and A. SCHÖNHOFER. Theory of Chirality Functions, generalized for Molecules with Chiral Ligands. *Theor. Chim. Acta* 29 (1973), 269-304.
- [16] MILNOR, J. and J. STASHEFF. *Characteristic Classes*. Princeton Univ. Press, 1974.
- [17] RUCH, E. and A. SCHÖNHOFER. Theorie der Chiralitätsfunktionen. *Theor. Chim. Acta* 19 (1970), 225-287.
- [18] RYSER, H. *Combinatorial Mathematics*. Carus Math. Monographs 14, Wiley, 1963.
- [19] SHATZ, S. S. The Decomposition and Specialization of Algebraic Families of Vectorbundles. *Compositio Math.* 35 (1977), 163-187.
- [20] SNAPPER, E. Group Characters and Nonnegative integral Matrices. *J. of Algebra* 19 (1971), 520-535.
- [21] MUIRHEAD, R. F. Some Methods Applicable to Identities and Inequalities of Symmetric Algebraic Functions of n Letters. *Proc. Edinburgh Math. Soc.* 21 (1903), 144-157.
- [22] HAZEWINKEL, M. A Partial Survey of the Uses of Algebraic Geometry in Systems and Control Theory. *Proc. INDAM Vol. 24* (Severi Centennial Conference, Rome, April 1979), Acad. Press, 1981.
- [23] ——— (Fine) Moduli Spaces in Linear System Theory: What they are and what they are good for. In: C. Martin, C. Byrnes (eds.), *Algebraic and Geometric Methods in Linear Systems Theory*, Reidel Publ. Co., 1980.
- [24] HUMPHREYS, J. E. *Linear Algebraic Groups*, Springer, 1975.
- [25] JANTZEN, J. C. *Moduln mit einem höchsten Gewicht*. Lect. Notes in Math. 750, Springer, 1970.
- [26] HUMPHREYS, J. E. Highest weight modules for semi-simple Lie Algebras. In: V. Dlab, P. Gabriel (eds.), *Representation Theory I*, Lect. Notes Math., 831, Springer, 1980, 72-103.
- [27] COLEMAN, A. J. Induced Representations with Applications to S_n . *Queen's Papers in Pure and Applied Math.* 4, Queen's Univ., Kingston, Canada, 1966.
- [28] CURTIS, C. W. and I. REINER. Representation Theory of Finite Group and Associative Algebras. *Interscience*, 1962.
- [29] JAMES, G. D. The Representation Theory of the Symmetric Groups. *Lect. Notes in Math.* 682, Springer, 1978.
- [30] BRUNOVSKY, P. A. A Classification of Linear Controllable Systems. *Kybernetika (Praha)* 3 (1970), pp. 173-187.
- [31] WONHAM, W. A. and A. S. MORSE. Feedback Invariants of Linear Multivariable Systems. *Automatica* 8 (1972), pp. 93-100.
- [32] MARTIN, C. Models of failure in Linear Systems. *Proceedings IEEE Conference on Decision and Control*, 1979, Ft. Lauderdale, Florida.
- [33] BYRNES, C. I. On the Control of Certain Infinite-dimensional Deterministic Systems by Algebra-geometric Techniques. *Amer. J. of Math.* 100 (1978), 1333-1381.
- [34] LASCOUX, A. Polynomes Symétriques, Foncteurs de Schur et Grassmanniennes. *Thèse Univ. de Paris VII*, 1977.
- [35] MACDONALD, I. G. *Symmetric Functions and Hall polynomials*. Clarendon Press, 1979.

- [36] RUCH, E. The Diagram Lattice as Structural Principle. *Theor. Chim. Acta* 38 (1975), 167-183.
- [37] RUCH, E. and A. MEAD. The Principle of Increasing Mixing Character and some of its Consequences. *Theor. Chim. Acta* 41 (1976), 96-117.
- [38] HAZEWINKEL, M. The "Mixing Character Order" cannot be measured by a finite set of Differentiable Functions. *Submitted Theor. Chim. Acta*.
- [39] KRAFT, H. P. and C. PROCESI. Closures of Conjugacy classes of matrices are normal. *Inv. Math.* 53 (1979), 227-247.
- [40] DECONCINI, C. and C. PROCESI. In preparation.
- [41] DECONCINI, C., D. EISENBUD and C. PROCESI. Young Diagrams and Determinantal Varieties. *Inv. Math.* 56 (1980), 129-165.
- [42] SPRINGER, T. A. Trigonometric sums, Green Functions of Finite Groups and Representations of Weyl Groups. *Inv. Math.* 36 (1976), 173-207.

(Reçu le 20 août 1982)

Michiel Hazewinkel

Dept. of Mathematics
P.O. Box 1738
Erasmus Univ. Rotterdam
3000 DR, Rotterdam
The Netherlands

Clyde Martin

Dept. of Mathematics and Statistics
Case Institute of Technology
Case Western Reserve Univ.
Cleveland, OHIO 44106

Vide-leer-empty