

# **Théorie des groupes et généralisations**

Objektyp: **Chapter**

Zeitschrift: **L'Enseignement Mathématique**

Band (Jahr): **47 (2001)**

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

PDF erstellt am: **23.07.2024**

## **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.

these known results makes these chapters eminently suitable as a text for graduate students. The remainder of the book is devoted to new research, providing, among other material, some remarkable improvements on Brown's classical representability theorem. In addition, the author introduces a class of triangulated categories — the “well generated triangulated categories” — and studies their properties. This exercise is particularly worthwhile in that many examples of triangulated categories are well generated, and the book proves several powerful theorems for this broad class. These chapters will interest researchers in the fields of algebra, algebraic geometry, homotopy theory and mathematical physics.

### ***Théorie des groupes et généralisations***

Hyman BASS, Alexander LUBOTZKY. — **Tree lattices**. — With appendices by H. Bass, L. Carbone, A. Lubotzky, G. Rosenberg, and J. Tits. — Progress in mathematics, vol. 176. — Un vol. relié, 16,5 × 24, de XII, 233 p. — ISBN 0-8176-4120-3. — Prix: SFr. 88.00. — Birkhäuser, Boston, 2001.

Group actions on trees furnish a unified geometric way of recasting the chapter of combinatorial group theory dealing with free groups, amalgams, and HNN extensions. Some of the principal examples arise from rank one simple Lie groups over a non-Archimedean local field acting on their Bruhat-Tits trees. In particular this leads to a powerful method for studying lattices in such Lie groups. The book presents a coherent survey of the results on uniform tree lattices, and a (previously unpublished) development of the theory of non-uniform tree lattices. The latter is much more complicated than the uniform case, so a good deal of attention is given to the construction and study of diverse examples. The fundamental technique is the encoding of tree actions in terms of the corresponding quotient ‘graphs of groups’.

William M. KANTOR, Akos SERESS, (Editors). — **Groups and computation III: proceedings of the International Conference at the Ohio State University, June 15-19, 1999**. — Ohio State University Mathematical Research Institute publications, vol. 8. — Un vol. relié, 17,5 × 24,5, de VIII, 368 p. — ISBN 3-11-016721-2. — Prix: DM 248.00. — Walter de Gruyter, Berlin, 2001.

This conference was the successor of two workshops on “Groups and Computation” held at DIMACS in 1991 and 1995. There are papers on permutation group algorithms, finitely presented groups, polycyclic groups, and parallel computation, providing a representative sample of the breadth of computation group theory. On the other hand, more than one third of the papers deal with computations in matrix groups, giving an in-depth treatment of the currently most active area of the field. The points of view of the papers range from explicit computations to group-theoretic algorithms to group-theoretic theorems needed for algorithm development.

Kevin P. KNUDSON. — **Homology of linear groups**. — Progress in mathematics, vol. 193. — Un vol. relié, 16,5 × 24, de XI, 192 p. — ISBN 3-7643-6415-7. — Prix: SFr. 98.00. — Birkhäuser, Basel, 2001.

The text traces the homology theory of linear groups from the fundamental results of Quillen, Suslin, van der Kallen and others to recent results on rank one groups. A chapter on the Friedlander-Milnor conjecture concerning the homology of algebraic groups made discrete is also included. This marks the first time that these results have been collected in a single volume. The book will be of interest to researchers and can be used as a textbook on graduate courses in  $K$ -theory and group cohomology.