

EM
S ■
PRESS

EMS Series of Congress Reports

The *EMS Series of Congress Reports* publishes volumes originating from conferences or seminars focusing on any field of pure or applied mathematics. The individual volumes include an introduction into their subject and review of the contributions in this context. Articles are required to undergo a refereeing process and are accepted only if they contain a survey or significant results not published elsewhere in the literature.

Previously published in this series:

- Trends in Representation Theory of Algebras and Related Topics, *A. Skowroński (Ed.)*
K-Theory and Noncommutative Geometry, *G. Cortiñas et al. (Eds.)*
Classification of Algebraic Varieties, *C. Faber, G. van der Geer, E. Looijenga (Eds.)*
Surveys in Stochastic Processes, *J. Blath, P. Imkeller, S. Røelly (Eds.)*
Representations of Algebras and Related Topics, *A. Skowroński, K. Yamagata (Eds.)*
Contributions to Algebraic Geometry. Impanga Lecture Notes, *P. Pragacz (Ed.)*
Geometry and Arithmetic, *C. Faber, G. Farkas, R. de Jong (Eds.)*
Derived Categories in Algebraic Geometry. Toyko 2011, *Y. Kawamata (Ed.)*
Advances in Representation Theory of Algebras, *D. J. Benson, H. Krause, A. Skowroński (Eds.)*
Valuation Theory in Interaction, *A. Campillo, F.-V. Kuhlmann, B. Teissier (Eds.)*
Representation Theory – Current Trends and Perspectives, *H. Krause et al. (Eds.)*
Functional Analysis and Operator Theory for Quantum Physics. The Pavel Exner Anniversary Volume, *J. Dittrich, H. Kovařík, A. Laptev (Eds.)*
Schubert Varieties, Equivariant Cohomology and Characteristic Classes, *J. Buczyński, M. Michalek, E. Postingshel (Eds.)*
Non-Linear Partial Differential Equations, Mathematical Physics, and Stochastic Analysis, *F. Gesztesy et al. (Eds.)*
Spectral Structures and Topological Methods in Mathematics, *M. Baake, F. Götze, W. Hoffmann (Eds.)*
 t -Motives: Hodge Structures, Transcendence and Other Motivic Aspects, *G. Böckle et al. (Eds.)*
Probabilistic Structures in Evolution, *E. Baake, A. Wakolbinger (Eds.)*
Partial Differential Equations, Spectral Theory, and Mathematical Physics. The Ari Laptev Anniversary Volume, *P. Exner, R. L. Frank, F. Gesztesy, H. Holden, T. Weidl (Eds.)*



Representations of Algebras and Related Structures

International Conference on Representations of Algebras,
ICRA 2020, 9–25 November 2020

Edited by

Aslak Bakke Buan

Henning Krause

Øyvind Solberg



Editors

Aslak Bakke Buan
Institutt for matematiske fag
Fakultet for informasjonsteknologi og
elektroteknikk
Norges teknisk-naturvitenskapelige universitet
7491 Trondheim, Norway
E-mail: aslak.buan@ntnu.no

Øyvind Solberg
Institutt for matematiske fag
Fakultet for informasjonsteknologi og
elektroteknikk
Norges teknisk-naturvitenskapelige universitet
7491 Trondheim, Norway
E-mail: oyvind.solberg@ntnu.no

Henning Krause
Fakultät für Mathematik
Universität Bielefeld
Postfach 100131
33501 Bielefeld, Germany
E-mail: hkrause@math.uni-bielefeld.de

Mathematics Subject Classification 2020: 16-06 (primary); 18-06, 13-06, 14-06 (secondary)

Keywords: representations of algebras, homological algebra, commutative algebra, triangulated categories, topological data analysis, cluster algebras, tensor categories, homological conjectures

ISBN 978-3-98547-054-9

Bibliographic information published by the Deutsche Nationalbibliothek

The Deutsche Nationalbibliothek lists this publication in the Deutsche Nationalbibliografie; detailed bibliographic data are available on the Internet at <http://dnb.dnb.de>.

Published by EMS Press, an imprint of the
European Mathematical Society – EMS – Publishing House GmbH
Institut für Mathematik
Technische Universität Berlin
Straße des 17. Juni 136
10623 Berlin, Germany
<https://ems.press>

© 2023 EMS Press

Typeset using the authors' LaTeX sources: Pablo Fernández Gallardo, Madrid, Spain
Printed in Germany
© Printed on acid free paper