S
E
M
S
M
E
S

EMS Monographs in Mathematics

Edited by
Hugo Duminil-Copin (Institut des Hautes Études Scientifiques (IHÉS), Bures-sur-Yvette, France)
Gerard van der Geer (University of Amsterdam, The Netherlands)
Thomas Kappeler (University of Zürich, Switzerland)
Paul Seidel (Massachusetts Institute of Technology, Cambridge, USA)

EMS Monographs in Mathematics is a book series aimed at mathematicians and scientists. It publishes research monographs and graduate level textbooks from all fields of mathematics. The individual volumes are intended to give a reasonably comprehensive and selfcontained account of their particular subject. They present mathematical results that are new or have not been accessible previously in the literature.

Previously published in this series:

Richard Arratia, A.D. Barbour and Simon Tavaré, *Logarithmic Combinatorial Structures: A Probabilistic Approach*
Demetrios Christodoulou, *The Formation of Shocks in 3-Dimensional Fluids*
Sergei Buyalo and Viktor Schroeder, *Elements of Asymptotic Geometry*
Demetrios Christodoulou, *The Formation of Black Holes in General Relativity*
Joachim Krieger and Wilhelm Schlag, *Concentration Compactness for Critical Wave Maps*
Jean-Pierre Bourguignon, Oussama Hijazi, Jean-Louis Milhorat, Andrei Moroianu and Sergiu Moroianu, *A Spinorial Approach to Riemannian and Conformal Geometry*
Kazuhiro Fujiwara and Fumiharu Kato, *Foundations of Rigid Geometry I*
Demetrios Christodoulou, *The Shock Development Problem*
Diogo Arsénio and Laure Saint-Raymond, *From the Vlasov–Maxwell–Boltzmann System to Incompressible Viscous Electro-magneto-hydrodynamics, Vol. 1*

Paul Balmer
Ivo Dell'Ambrogio

Mackey 2-Functors and Mackey 2-Motives

European Mathematical Society

Authors:

Paul Balmer
Mathematics Department
University of California Los Angeles
Los Angeles, CA 90095-1555
USA

e-mail: balmer@math.ucla.edu

Ivo Dell'Ambrogio
Laboratoire Paul Painlevé
Université de Lille, CNRS, UMR 8524
59000 Lille
France

e-mail: ivo.dell-ambrogio@univ-lille.fr

2010 Mathematics Subject Classification: Primary: 20J05, 18B40, 55P91; secondary: 18M30, 18N10, 18N25, 18N40, 19A22, 20C99

Key words: Groupoids, Mackey formula, equivariant, 2-functors, derivators, ambidexterity, separable monadicity, spans, string diagrams, motivic decompositions, Burnside algebras

ISBN 978-3-03719-209-2

The Swiss National Library lists this publication in The Swiss Book, the Swiss national bibliography, and the detailed bibliographic data are available on the Internet at http://www.helveticat.ch.

This work is subject to copyright. All rights are reserved, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, re-use of illustrations, recitation, broadcasting, reproduction on microfilms or in other ways, and storage in data banks. For any kind of use permission of the copyright owner must be obtained.

© 2020 European Mathematical Society

Contact address:

European Mathematical Society – EMS – Publishing House
Institut für Mathematik
Technische Universität Berlin
Straße des 17. Juni 136
10623 Berlin
Germany

info@ems.press
https://ems.press

Typeset using the authors' TEX files: le-tex publishing services GmbH, Leipzig, Germany
Printing and binding: Beltz Bad Langensalza GmbH, Bad Langensalza, Germany
∞ Printed on acid free paper
9 8 7 6 5 4 3 2 1

To our wives and daughters

– Aleksandra, Anne, Chloe, Jeanne, Laura and Sophie –

for their love and support, and for patiently indulging us during months of groupoid-juggling and string-untangling.