

# CAHIERS DE TOPOLOGIE ET GÉOMÉTRIE DIFFÉRENTIELLE CATÉGORIQUES

TAC

**TAC : Theory and Applications of Categories**

*Cahiers de topologie et géométrie différentielle catégoriques*, tome 52, n° 2 (2011), p. 156-160

<[http://www.numdam.org/item?id=CTGDC\\_2011\\_\\_52\\_2\\_156\\_0](http://www.numdam.org/item?id=CTGDC_2011__52_2_156_0)>

© Andrée C. Ehresmann et les auteurs, 2011, tous droits réservés.

L'accès aux archives de la revue « Cahiers de topologie et géométrie différentielle catégoriques » implique l'accord avec les conditions générales d'utilisation (<http://www.numdam.org/conditions>). Toute utilisation commerciale ou impression systématique est constitutive d'une infraction pénale. Toute copie ou impression de ce fichier doit contenir la présente mention de copyright.

NUMDAM

*Article numérisé dans le cadre du programme  
Numérisation de documents anciens mathématiques  
<http://www.numdam.org/>*

## **T<sub>AC</sub> : Theory and Applications of Categories**

Hereafter we give some information about the electronic Journal:  
*Theory and Applications of Categories (T<sub>AC</sub>)*, ISSN 1201-561X

### **Contents of VOLUME 24, 2010**

#### *Volume 24 - 2010*

1. STEPHEN LACK, R.F.C. WALTERS, AND R.J. WOOD, Bicategories of spans as cartesian bicategories, 1-24
2. J.M. EGGER, The Fröbenius relations meet linear distributivity, 25-38
3. MARIA EMILIA MAIETTI, Joyal's arithmetic universe as list-arithmetic pretopos, 39-83
4. F. MARMOLEJO AND R. J. WOOD, Monads as extension systems - no iteration is necessary, 84-113
5. GEORGE RAPTIS, On a conjecture by J.H.Smith, 114-116
6. JONATHON FUNK AND PIETER HOFSTRA, Topos theoretic aspects of semigroup actions, 117-147
7. JONATHAN WOOLF, Transversal homotopy theory, 148-178
8. MARK W. JOHNSON, On modified Reedy and modified projective model structures, 179-208
9. MICHEL HEBERT, Finitely presentable morphisms in exact sequences, 209-220
10. F. W. LAWVERE AND M. MENNI, The Hopf algebra of Mius intervals, 221-265
11. T. KENNEY AND R.J. WOOD, Tensor products of sup-lattices and generalized sup-arrows, 266-287
12. SUSAN NIEFIELD, Lax presheaves and exponentiability, 288-301
13. ROBERT DAWSON, ROBERT PARE AND DORETTE PRONK, The span construction, 302-377
14. MICHAEL BARR, JOHN F. KENNISON, AND R. RAPHAEL, On \*-autonomous categories of topological modules, 378-393
15. CLAUDIO PISANI, A logic for categories, 394-417
16. DAVID OURY, On the duality between trees and disks, 418-450

17. DOMINIQUE BOURN, Internal profunctors and commutator theory; applications to extensions classification and categorical Galois Theory, 451-488
18. JOHN C. BAEZ, ALEXANDER E. HOFFNUNG, AND CHRISTOPHER D. WALKER, Higher Dimensional Algebra VII: Groupoidification, 489-553
19. DIMITRI CHIKHLADZE, STEPHEN LACK, AND ROSS STREET, Hopf monoidal comonads, 554-563
20. BERTRAND J. GUILLOU, Strictification of categories weakly enriched in symmetric monoidal categories, 564-579
21. G.S.H. CRUTTWELL AND MICHAEL A. SHULMAN, A unified framework for generalized multicategories, 580-655.

*Volume 23 - The Bourn Festschrift\**

A special volume dedicated to Dominique Bourn on the occasion of his 60<sup>th</sup> birthday.

Foreword, The guest editors, 1-6

1. ANDREA MONTOLI, Action accessibility for categories of interest, 7-21
2. TOMAS EVERAERT AND MARINO GRAN, Homology of  $n$ -fold groupoids, 22-41
3. ROSS STREET AND DOMINIC VERITY, The comprehensive factorization and torsors, 42-75
4. TAMAR JANELIDZE, Snake Lemma in incomplete relative homological categories, 76-91
5. FRANCIS BORCEUX, STEFAAN CAENEPEEL AND GEORGE JANELIDZE, Monadic approach to Galois descent and cohomology, 92-112
6. SANDRA MANTOVANI AND GIUSEPPE METERE, Internal crossed modules and Peiffer Condition, 113-135
7. G. JANELIDZE AND W. THOLEN, Strongly separable morphisms in general categories, 136-149
8. DIANA RODELO AND TIM VAN DER LINDEN, The third cohomology group classifies double central extensions, 150-169
9. N. MARTINS-FERREIRA, Star-multiplicative graphs in pointed protomodular categories, 170-198
10. ELISABETH BURRONI AND JACQUES PENON, A metric tangential calculus, 199-220

11. ZURAB JANELIDZE, The pointed subobject functor,  $3 \times 3$  lemmas, and subtractivity of spans, 221-242
12. REINHARD BERGER, A categorical approach to integration, 243-250
13. J. ADAMEK, J. ROSICKY AND E. M. VITALE, What are sifted colimits? 251-260

\* The Editors of TAC wish to thank Andree Ehresmann, George Janelidze, Jiri Rosicky, Walter Tholen and Enrico Vitale who acted as guest editors for this special volume.

## General Information

*THEORY AND APPLICATIONS OF CATEGORIES* (ISSN 1201-561X) will disseminate articles that significantly advance the study of categorical algebra or methods, or that make significant new contributions to mathematical science using categorical methods. The scope of the journal includes: all areas of pure category theory, including higher dimensional categories; applications of category theory to algebra, geometry and topology and other areas of mathematics; applications of category theory to computer science, physics and other mathematical sciences; contributions to scientific knowledge that make use of categorical methods.

Articles appearing in the journal have been carefully and critically refereed under the responsibility of members of the Editorial Board. Only papers judged to be both significant and excellent are accepted for publication.

The method of distribution of the journal is via the Internet tools [www/ftp](http://www/ftp). The journal is archived electronically and in printed paper format. The full table of contents is at [www.tac.mta.ca/tac/](http://www.tac.mta.ca/tac/)

## Subscription/Access to articles

Individual subscribers receive abstracts of accepted papers by electronic mail. Compiled TeX (.dvi), Postscript and PDF files of the full articles are available by Web/ftp. Details will be e-mailed to new subscribers and are available by [www/ftp](http://www/ftp). To subscribe, send a request to: [tac@mta.ca](mailto:tac@mta.ca) including a full name and postal address. The journal is free for individuals. For institutional subscription, send enquiries to the Managing Editor, Robert Rosebrugh, [rrosebrugh@mta.ca](mailto:rrosebrugh@mta.ca).

## Information for authors

The typesetting language of the journal is  $T_E X$ , and  $LaT_E X$  is the preferred flavour.  $T_E X$  source of articles for publication should be submitted by e-mail directly to an appropriate Editor. They are listed below. Please obtain detailed information on submission format and style files from the journal's WWW server at the URL: <http://www.tac.mta.ca/tac/>. You may also write to [tac@mta.ca](mailto:tac@mta.ca) to receive details by e-mail.

## Editorial board

Robert ROSEBRUGH, Mount Allison University (Managing Editor):  
[rrosebrugh@mta.ca](mailto:rrosebrugh@mta.ca)

Michael BARR, McGill University (Associate Managing Editor):  
[barr@math.mcgill.ca](mailto:barr@math.mcgill.ca)

Richard BLUTE, Université d'Ottawa: [rblute@mathstat.uottawa.ca](mailto:rblute@mathstat.uottawa.ca)

Lawrence BREEN, Université Paris 13: [breen@math.univ-paris13.fr](mailto:breen@math.univ-paris13.fr)

Ronald BROWN, University of North Wales: [r.brown@bangor.ac.uk](mailto:r.brown@bangor.ac.uk)

Aurelio CARBONI, Universita dell Insubria: [carboni@uninsubria.it](mailto:carboni@uninsubria.it)

Valeria DE PAIVA, Palo Alto Research Center: [paiva@parc.xerox.com](mailto:paiva@parc.xerox.com)

Ezra GETZLER, Northwestern University: [getzler@math.northwestern.edu](mailto:getzler@math.northwestern.edu)

Martin HYLAND, University of Cambridge: [m.hyland@cam.ac.uk](mailto:m.hyland@cam.ac.uk)

P. T. JOHNSTONE, University of Cambridge: [ptj@dpmms.cam.ac.uk](mailto:ptj@dpmms.cam.ac.uk)

Anders KOCK, University of Aarhus: [kock@imf.au.dk](mailto:kock@imf.au.dk)

Stephen LACK, University of Western Sydney: [s.lack@uws.edu.au](mailto:s.lack@uws.edu.au)

F. William LAWVERE, State University of New York at Buffalo:

[wlawvere@acsu.buffalo.edu](mailto:wlawvere@acsu.buffalo.edu)

Jean-Louis LODAY, Université Louis Pasteur et CNRS, Strasbourg:

[loday@math.u-strasbg.fr](mailto:loday@math.u-strasbg.fr)

Ieke MOERDIJK, University of Utrecht: [moerdijk@math.uu.nl](mailto:moerdijk@math.uu.nl)

Susan NIEFIELD, Union College: [niefiels@union.edu](mailto:niefiels@union.edu)

Robert PARE, Dalhousie University: [pare@mathstat.dal.ca](mailto:pare@mathstat.dal.ca)

Brooke SHIPLEY, University of Illinois at Chicago:

[bshipley@math.uic.edu](mailto:bshipley@math.uic.edu)

Jiri ROSICKY, Masaryk University: [rosicky@math.muni.cz](mailto:rosicky@math.muni.cz)

James STASHEFF, University of North Carolina: [jds@math.unc.edu](mailto:jds@math.unc.edu)

Ross STREET, Macquarie University: street@math.mq.edu.au

Walter THOLEN, York University: tholen@mathstat.yorku.ca

Myles TIERNEY, Rutgers University: tierney@math.rutgers.edu

Robert F. C. WALTERS, University of Sydney: robert.walters@unisubria.it

R. J. WOOD, Dalhousie University: rjwood@mathstat.dal.ca