

# Communications in Mathematical Physics

Volume 170 Number 1 1995

- P. Podleś Symmetries of Quantum Spaces. Subgroups and Quotient Spaces of Quantum  $SU(2)$  and  $SO(3)$  Groups 1
- H. von Dreifus, A. Klein, Taming Griffiths' Singularities:  
J. F. Perez Infinite Differentiability of Quenched Correlation Functions 21
- D. Altschuler, L. Freidel On Universal Vassiliev Invariants 41
- H. Waelbroeck  $B \wedge F$  Theory and Flat Spacetimes 63
- N. Reshetikhin Quasitriangularity of Quantum Groups at Roots of 1 79
- K. Takasaki Dispersionless Toda Hierarchy and Two-Dimensional String Theory 101
- A. Bilal Non-Local Matrix Generalizations of  $W$ -Algebras 117
- H. Awata, M. Fukuma, Quasifinite Highest Weight Modules over the  
Y. Matsuo, S. Odake Super  $\mathcal{W}_{1+\infty}$  Algebra 151
- Y. Guo, K. Nakamitsu, Global Finite-Energy Solutions of the  
W. Strauss Maxwell-Schrödinger System 181
- B. Enriquez Quantum Principal Commutative Subalgebra in the Nilpotent Part of  $U_q\widehat{\mathfrak{sl}}_2$  and Lattice KdV Variables 197
- J. H. Maddocks, R. L. Pego An Unconstrained Hamiltonian Formulation for Incompressible Fluid Flow 207
- B. Feigin, V. Schechtman, On Algebraic Equations Satisfied by Hypergeometric  
A. Varchenko Correlators in WZW Models. II. 219

Indexed in *Current Contents*  
Evaluated and abstracted for *PHYS* on *STN*  
CMPHAY 170 (1) 1–248  
May (III) 1995



Springer



# Springer L<sup>A</sup>T<sub>E</sub>X and plain-T<sub>E</sub>X macros

We can use your T<sub>E</sub>X files directly for phototypesetting if you have used our macros.  
Makropackages are available for the following journals:

**Ijour1** L<sup>A</sup>T<sub>E</sub>X styles for Acta Informatica, Applicable Algebra in Engineering, Communication and Computing, Archive for Mathematical Logic, Astronomy & Astrophysics Reviews, Calculus of Variations, Communications in Mathematical Physics, Continuum Mechanics and Thermodynamics, Economic Theory, Inventiones mathematicae, Journal of Evolutionary Economics, Journal of Mathematical Biology, Manuscripta mathematica, Mathematische Annalen, Mathematische Semesterberichte, Mathematische Zeitschrift, Numerische Mathematik, Probability Theory and Related Fields, Statistical papers, Theoretica Chimica Acta

**Pjour1g** global plain T<sub>E</sub>X packages for all journals mentioned above; **Pjour 1** may also still be used. All packages are available via mailserver, FTP server or on DOS diskettes.

## Mailserver

Send an e-mail message to svserv@vaxntp.springer.de  
which must contain one (several) of the following commands:

**Ijour1** get /tex/latex/ljour1.zip  
**Pjour1g** get /tex/plain/pjour1g.zip

In order to be transmitted ungarbled via the net, the files are pkzipped and uunencoded. The line get /tex/help-tex.txt in your e-mail to svserv will send you a file explaining how to unpack the files you receive.  
Please do not send regular e-mail to this address.

## FTP server

The internet address is 192.129.24.12 (trickntp.springer.de) The username is FTP or ANONYMOUS and the files are in the directory /pub/tex

## Diskettes

To get the macro files and the AMS fonts (when needed) on 3.5" DOS diskettes please write to:

Springer-Verlag, Journal Production,  
Tiergartenstr. 17  
D-69121 Heidelberg, Germany  
e-mail: [springer@vaxntp.springer.de](mailto:springer@vaxntp.springer.de)  
FAX number: x 49 6221 487625

Please indicate clearly which macro package you need and the journal for which your paper is intended.

**Use our L<sup>A</sup>T<sub>E</sub>X and plain-T<sub>E</sub>X macros  
to prepare your article  
for this and for other Springer journals.**

# Springer Journals Preview Service

## List of the Journals

### ■ Medicine

- Abdominal Imaging
- Acta Neuropathologica
- Anatomy and Embryology
- Annals of Hematology
- Archives of Gynecology and Obstetrics
- Calcified Tissue International
- Cancer Chemotherapy and Pharmacology
- Cancer Immunology, Immunotherapy
- CardioVascular and Interventional Radiology
- Cell and Tissue Research
- Diabetologia
- European Journal of Cardio-thoracic Surgery
- European Journal of Nuclear Medicine
- European Journal of Orthopaedic Surgery and Traumatology (Continuation of Orthopädie-Traumatologie)
- European Journal of Pediatrics
- European Radiology
- Experimental Brain Research
- Der Hautarzt
- Histochemistry
- Intensive Care Medicine
- International Archives of Occupational and Environmental Health
- International Journal of Colorectal Disease
- Journal of Cancer Research and Clinical Oncology
- Langenbecks Archiv für Chirurgie
- Neuroradiology
- Nouvelle Revue Française d'Hématologie
- Orthopädie-Traumatologie
- Der Pathologe
- Pediatric Cardiology
- Pediatric Radiology
- Perinatal Medizin
- Psychopharmacology
- Psychotherapeut
- Der Radiologe
- Revue d'Imagerie Médicale
- Skeletal Radiology
- Surgical Endoscopy
- Surgical and Radiologic Anatomy
- System Famille
- Transplant International

Virchows Archiv

World Journal of Surgery

### ■ Biomedical Sciences

- Archives of Toxicology
- European Journal of Applied Physiology and Occupational Physiology
- European Journal of Clinical Pharmacology
- Human Genetics
- Immunogenetics
- Journal of Molecular Medicine
- Naunyn-Schmiedeberg's Archives of Pharmacology
- Pfluegers Archiv - European Journal of Physiology
- Radiation and Environmental Biophysics
- Research in Experimental Medicine
- Springer Seminars in Immunopathology

### ■ Biology

- Applied Microbiology and Biotechnology
- Archives of Environmental Contamination and Toxicology
- Archives of Microbiology
- Behavioral Ecology and Sociobiology
- Biological Cybernetics
- Bulletin of Environmental Contamination and Toxicology
- Chromosoma
- Current Genetics
- Current Microbiology
- Differentiation
- Environmental Management
- European Biophysics Journal
- European Journal of Biochemistry
- Experientia (Birkhäuser)
- Irrigation Science

Tables of Contents are free of charge, all BiblioAbstracts are available for US\$ 20,- per year. For details please send an e-mail message containing

the command HELP to our mailserver

E-mail: SVJPS@.SPRINGER.DE

The Tables of contents are available via:

ftp: ftp.springer.de (192.129.24.12)

in directory: /pub/TOC

gopher:gopher.springer.de (192.129.24.12)

www: http://www.springer.de

For any further information

please contact e-mail:

em-helpdesk@springer.de

Journal of Comparative Physiology A

Journal of Comparative Physiology B

The Journal of Membrane Biology

Journal of Molecular Evolution

Mammalian Genome

Marine Biology

Microbial Ecology

MGG Molecular & General Genetics

Mycorrhiza

Naturwissenschaften

Oecologia

Plant Cell Reports

Planta

Polar Biology

Roux's Archives of Developmental Biology

Sexual Plant Reproduction

TAG Theoretical and Applied Genetics

Trees

### ■ Mathematics

- Archive for Mathematical Logic
- Calculus of Variations and Partial Differential Equations
- Combinatorica
- Inventiones mathematicae
- Journal of Mathematical Biology
- manuscripta mathematica
- Mathematica Annalen
- Mathematische Semesterberichte
- Mathematische Zeitschrift
- Numerische Mathematik
- Probability Theory and Related Fields

### ■ Chemistry

- Fresenius' Journal of Analytical Chemistry
- Theoretica Chimica Acta
- Zeitschrift für Lebensmittel-Untersuchung und -Forschung

### ■ Geosciences

- Annales Geophysicae
- Bulletin Géodésique
- Bulletin of Volcanology
- Climate Dynamics
- Contributions to Mineralogy and Petrology
- manuscripta geodaetica
- Physics and Chemistry of Minerals

### ■ Computer Science

- Acta Informatica
- Informatik - Forschung und Entwicklung
- Machine Vision and Applications

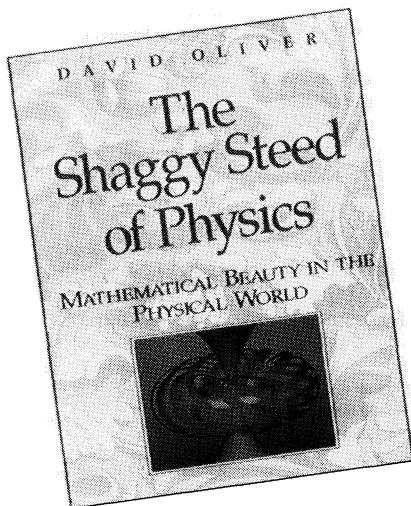


Springer

electronic media

d&p 2703.NM/E/1

# Fascinating Books! Fascinating Topics!



D. Oliver

## The Shaggy Steed of Physics

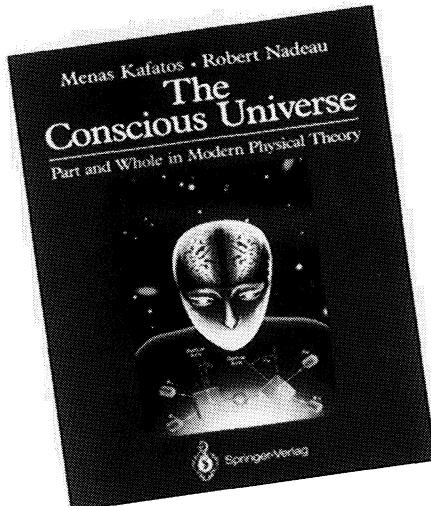
### Mathematical Beauty in the Physical World

1994. XV, 298 pp. 71 figs. Hardcover DM 78,-  
ISBN 3-540-94163-0

G. Caglioti

## The Dynamics of Ambiguity

1992. XXI, 170 pp. 60 figs., including 10 in colour  
Hardcover DM 102,- ISBN 3-540-52020-1



M. Kafatos, R. Nadeau

## The Conscious Universe

### Part and Whole in Modern Physical Theory

1993. VII, 214 pp. 31 figs., 3 in full color Softcover  
DM 34,- ISBN 3-540-97262-5

W. Rindler

## Essential Relativity

### Special, General, and Cosmological

4th printing 1993. Rev. 2nd ed. 1980. XV, 284 pp.  
44 figs. (Texts and Monographs in Physics)  
Softcover DM 96,- ISBN 3-540-10090-3



**Springer**

rb.1822.MNT/E/1

Prices are subject to change without notice. In EC countries the local VAT is effective.

Customers in EC countries, please state your VAT-Identification-Number if applicable.

For information on prices in Austrian schillings and Swiss francs please consult the German book directory "VLB - Verzeichnis lieferbarer Bücher" or our general catalogue.

**Springer-Verlag** □ Herdberger Platz 3, D-14197 Berlin, F.R. Germany □ 175 Fifth Ave., New York, NY 10010, USA □ Sweetapple House, Catteshall Road, Godalming, Surrey GU7 3DJ, England □ 26, rue des Carmes, F-75005 Paris, France □ 3-13, Hongo 3-chome, Bunkyo-ku, Tokyo 113, Japan □ Room 701, Mirror Tower, 61 Mody Road, Tsimshatsui, Kowloon, Hong Kong □ Avinguda Diagonal, 468-4<sup>o</sup> C, E-08006 Barcelona, Spain □ Wesselényi u. 28, H-1075 Budapest, Hungary