INTERNATIONAL ASSOCIATION OF MATHEMATICAL PHYSICS

President:
Prof. J.R. Klauder
Department of Mathematics
University of Florida
Gainesville, FL 32611, USA

Vice-President:
Prof. S.P. Novikov
Steklov Institute of Math.
Vavilova St. 42
Moscow, V-333, USSR

Secretary:
Prof. Ph. Blanchard
Fakultät für Physik
Universität Bielefeld
D-4800 Bielefeld 1, BRD

Treasurer:
Prof. G.G. Emch
Department of Mathematics
University of Florida
Gainesville, FL 32611, USA

March 1991

IAMP NEWS BULLETIN

The result of the election for the IAMP officers

President:	A. Jaffe
Vice-President:	Y. Sinai
Secretary:	D. Buchholz
Treasurer:	G. Emch

February 12, 1991

To: IAMP Membership

From: John R. Klauder

Re: Leipzig Conference

The next IAMP Congress will take place in Leipzig, FRG, from July 30, 1991, through August 9, 1991. Included with this memo is an outline of the program established by the Scientific Organizing Committee as it has so far been determined. As explained in the earlier announcement, the afternoons are generally devoted to two subjects and are divided into two periods of two hours each. In the first two hour period lectures will be presented for one of the topics while an upgraded poster session will take place for the other topic. In the second two hour period the schedule is reversed. Thus there will be a Topical Poster Session associated with each of the 13 subject divisions. *The responsibility for organizing each Topical Poster Session rests with the Session Organizer.* Each of the Topical Poster Sessions will consist of ten posters, half of which are invited by the Session Organizer and the other half of which are selected by the Session Organizer from proposed posters submitted to him/her. If you wish to submit a poster to the conference, *send you poster to the Session Organizer for the topic in which your presentation falls.* Posters should consist of at most *four standard size (e.g., A4) pages.* If your poster is selected by the Session Organizer for the Topical Poster Session, then you will be able to give a formal *ten minute* presentation during the appropriate two hour time period. Posters not selected by the Session Organizer for the Topical Poster Session will be transferred to the Scientific Organizers for a General Poster Session. A special time for the General Poster Session will be set aside, most probably on the weekend. Thus everyone who wishes to present a poster will have the opportunity to do so.

Further details regarding registration, housing, meals, travel suggestions, etc., will be forthcoming from the Local Organizing Committee at an early time.

The IAMP Treasurer, G.G. Emch, would like me to remind all IAMP members to pay their dues for 1991, and also to pay for back years if they are owed. *The year through which your dues have currently been paid is listed as a two digit number on the top right-hand side of the mailing label by which you received this News Bulletin. Please check that date now. If you owe back dues of more than three years, the IAMP is presently making a one-time special offer to forgive all past dues if you pay three years worth plus your 1991 dues at the present time.* Dues are currently set at $10 per year, or the equivalent in a number of other currencies. Payment for dues should be sent to any one of the collection centers which are listed elsewhere in this News Bulletin. *If you pay into either the French or the Italian account, please send a copy of your receipt to the IAMP Treasurer since these accounts do not identify the payee by name!*

PROGRAM

ML = Morning Lecture ASOB = Afternoon Session Organized by

1 Analysis on Manifolds and Classical Mechanics July 30
ML: de la Llave ASOB: Elworthy

2 Quantum Groups and Non-Commuttaive Differential Geometry July 30
ML: Zumino ASOB: Woronowicz

3 Chaotic Quantum Systems July 31
ML: Chirikov ASOB: Combescure

4 Equilibrium Statistical Mechanics July 31
ML: D. Fisher ASOB: Shlosman

5 Classical Dynamical Syatems and Random Perturbations Aug. 1
ML: Bunimovich ASOB: Kifer

6 Disordered Systems Aug. 1
ML: Pastur ASOB: Kupiainen

7 Nonequilibrium Statistical Mechanics Aug. 2
ML: Martinelli ASOB: Fritz

Round Table Discussion on the Foundations of Quantum Mechanics Aug. 2
afternoon Goldstein, Haag, Omnes, Primas, Zurek

Invited Lectures Aug. 4
afternoon Connes, Faddeev

8 General Theory of Quantized Fields Aug. 6
ML: Fredenhagen ASOB: Iagolnitzer

9 Nonrelativistic Quantum Mechanics (stationary) Aug. 6
ML: Solovej ASOB: Herbst

10 Special Systems in Quantum Field Theory Aug. 7
ML: Gallavotti ASOB: E. Seiler

11 Scattering Theory, Inverse Problems Aug. 7
ML: Graf ASOB: Enss

12 Conformal and Topological Field Theory Aug. 8
ML: Jackiw ASOB: Gawedzki

13 General Relativity and Classical Field Theory Aug. 8
ML: Klainerman ASOB: Neugebauer

Invited Lectures Aug. 9
morning Manin, Cuntz

IAMP 91 - 10th INTERNATIONAL CONGRESS ON MATHEMATICAL PHYSICS

July 30 - August 9, 1991

University of Leipzig, Germany

Bulletin No. 1

(January 28, 1991)

1. G E N E R A L

The 10th International Congress on Mathematical Physics will be held at the

University of Leipzig, Germany

from

July 30 - August 9, 1991.

This Congress stands under the auspices of the Minister President of the Freestate of Saxony, Prof. Dr. K. Biedenkopf.

The meeting is sponsored by

Deutsche Forschungsgemeinschaft
International Association of Mathematical Physics
International Mathematical Union
International Union of Pure and Applied Physics
Siemens AG
Stiftungsfonds IBM Deutschland

SCIENTIFIC ORGANIZING COMMITTEE

W Thirring (Vienna,Chairman), D Buchholz (Hamburg),
R L Dobrushin (Moscow), J R Klauder (Gainesville), B Simon (Pasadena),
Ya G Sinai (Moscow), A Trautman (Warsaw), A S Wightman (Princeton)

SCIENTIFIC ADVISORY COMMITTEE

A Ashtekar (Syracuse), R J Baxter (Canberra), J Bellissard (Marseille),
R Benguria (Santiago), Ph Blanchard (Bielefeld),
J Bricmont (Louvain-la-Neuve), D Brydges (Charlottesville),
J Chayes (Los Angeles), P Collet (Palaiseau), J Cuntz (Heidelberg),
I Daubechies (Murray Hill), A Degasperis (Rome), R de la Llave (Austin),
V Enß (Berlin), J Ford (Atlanta), A Galindo (Madrid), F Gesztesy (Columbia),
L P Horwitz (Tel Aviv), W Hunziker (Zurich), A Martin (Geneva),
A A Migdal (Moscow), J Niederle (Prague), G Roepstorff (Aachen),
S Ruijsenaars (Amsterdam), H Siedentop (Braunschweig), F Strocchi (Pisa),
A A Slavnov (Moscow), H Spohn (Munich), D Szász (Budapest),
S L Woronowicz (Warsaw), J Yngvason (Reykjavik), D Zwanziger (New York)

The conference is organized by the University of Leipzig, 'Naturwissenschaftlich-Theoretisches Zentrum' (NTZ), the Department of Mathematics, and the Department of Physics.

The second (and last) bulletin will be mailed in June. Please, let us know already now your postal address at that time (use the enclosed registration form).

For the Local Organizing Committee:

B Geyer, A Uhlmann

For further information contact:

Postal address:

c/o G Hofmann
Universität Leipzig
Naturwissenschaftlich-Theoretisches Zentrum
Augustusplatz 10
Leipzig
D - O-7010
Germany

Phone: (Leipzig) 719 3502
2497
7623

Telex: 051 350 uni dd

Fax: (Leipzig) 719 2499,
(Leipzig) 3741 20 9325

E-Mail: voigt@uni-leipzig.dbp.de
(c=de; a=dbp; p=uni-leipzig; ou=ntz; s=voigt)

2. S C I E N T I F I C P R O G R A M

Each morning during the conference there will be two plenary lectures in line to be given by invited speakers chosen by the Scientific Organizing Committee. Only on Sunday (August 4) the plenary lectures will be held in the afternoon.

Afternoon session speakers will be chosen by the session organizers, who are also responsible for the poster sessions (current addresses of the session organizers can be found at the end of this bulletin). The afternoon session of a certain section will be run in parallel with the poster session of the adjacent one of that day and vice versa. There will also be time for further discussion.

No organized scientific activities will be scheduled for Saturday (August 3) and Sunday morning (August 4).

TUESDAY, July 30

Opening Session

Section 1:
Analysis on Manifolds and Classical Mechanics
Morning Lecture : R de la Llave (Austin)
Afternoon Session
organized by : K D Elworthy (Warwick)

Section 2:
Quantum Groups and Non-Commutative Differential Geometry
Morning Lecture : B Zumino (Berkeley)
Afternoon Session
organized by : S L Woronowicz (Warsaw)

WEDNESDAY, July 31

Section 3:
Chaotic Quantum Systems
Morning Lecture : B V Chirikov (Novosibirsk)
Afternoon Session
organized by : M Combescure (Paris)

Section 4:
Equilibrium Statistical Mechanics
Morning Lecture : D Fisher (Princeton)
Afternoon Session
organized by : S B Shlosman (Moscow)

THURSDAY, August 1

Section 5:
Classical Dynamical Systems and Random Perturbations
Morning Lecture : L A Bunimovich (Moscow)
Afternoon Session
organized by : Y Kifer (Ithaca)

Section 6:
Disordered Systems
Morning Lecture : L A Pastur (Kharkov)
Afternoon Session
organized by : A Kupiainen (Helsinki)

FRIDAY, August 2

Section 7:
Nonequilibrium Statistical Mechanics
Morning Lecture : F Martinelli (Rome)
Afternoon Session
organized by : J Fritz (Budapest)

Round Table Discussion:
On the Foundations of Quantum Mechanics
Participants : S Goldstein (New Brunswick),
R Haag (Hamburg),
R Omnès (Paris),
H Primas (Zurich),
W H Zurek (Los Alamos)

SATURDAY, August 3

no official program

SUNDAY, August 4

Afternoon : **Invited Lectures**

A Connes (Bures-sur-Yvette)
L D Faddeev (Leningrad)

MONDAY, August 5

program still open

TUESDAY, August 6

Section 8:
General Theory of Quantized Fields
Morning Lecture : K Fredenhagen (Berlin)
Afternoon Session
organized by : D Iagolnitzer (Saclay)

Section 9:
Nonrelativistic Quantum Mechanics (stationary)
Morning Lecture : J P Solovej (Princeton)
Afternoon Session
organized by : I Herbst (Charlottesville)

WEDNESDAY, August 7

Section 10:
Special Systems in Quantum Field Theory
Morning Lecture : G Gallavotti (Rome)
Afternoon Session
organized by : E Seiler (Munich)

Section 11:
Scattering Theory, Inverse Problems
Morning Lecture : G M Graf (Zurich)
Afternoon Session
organized by : V Enß (Berlin)

THURSDAY, August 8

Section 12:
Conformal and Topological Field Theory
Morning Lecture : R Jackiw (Cambridge, MIT)
Afternoon Session
organized by : K Gawedzki (Bures-sur-Yvette)

Section 13:
General Relativity and Classical Field Theory
Morning Lecture : S Klainerman (Princeton)
Afternoon Session
organized by : G Neugebauer (Jena)

FRIDAY, August 9

Morning : **Invited Lectures**

Yu I Manin (Moscow)
J Cuntz (Heidelberg)

Closing Session

3. P O S T E R S

Rules for poster sessions:

Posters (max. four pages A4) should be sent to the session organizers (current addresses of the session organizers can be found at the end of this bulletin). It is recommended to send one further copy to the Local Organizing Committee indicating the section it is submitted to on the front page (top right). The Local Organizing Committee will provide access to these contributions on the conference site.
For each section there will be a limited number (up to ten) of contributed and invited posters (5+5). Talks of 5-10 minutes at the poster sessions will be chosen by the session organizers.

4. P R O C E E D I N G S

The Proceedings of the Conference will be published by Springer-Verlag in a single volume of 500 pages at maximum. They will be edited by K Schmüdgen (Universität Leipzig, Fachbereich Mathematik, Augustusplatz 10, D - O-7010 Leipzig). According to the general publishing policy of Springer for proceedings, the contributions should be of high standard and of current interest and should avoid lengthy redraftings of papers already published elsewhere. Research announcements or summaries will not be admitted.

The Proceedings will mainly consist of the contributions of the invited speakers (plenary speakers and the main speaker in each section). For each of them 15 pages are reserved. These authors are asked to bring the final version of their articles ready to the conference or to send them to the Local Organizing Committee (c/o K Schmüdgen) in advance.

The Proceedings will also include a few shorter contributions (2 or 3) from each of the 13 sections. These papers should not exceed 5 pages. The decision concerning the selection of these papers will be made during the conference by the Scientific Organizing Committee and the session organizers.

All authors for the Proceedings are kindly asked to prepare their papers by using TEX and to provide the editor with their commented TEX source file (on diskette). Upon request, Springer-Verlag offers free of charge TEX macro packages to format the text according to Springer-Verlag's quality requirement.

For obtaining these macro packages please turn to:

c/o S Landgraf
Planung Physik
Springer-Verlag
Postfach 105280
Tiergartenstr. 17
Heidelberg 1
D -W-6900
Germany.

Telex: 461 723
Phone: (Heidelberg) 487 40718

Cable: Springerbuch
Fax: (Heidelberg) 439 82
(Heidelberg) 48 73 66

The conference fee to be paid by each participant will include coverage of a free copy of the Proceedings.

5. REGISTRATION

In order to confirm your participation and to help us to organize the conference, please use the accompanying registration form. The registration form should reach the Local Organizing Committee not later than **April 30, 1991.**

The conference fee will be **240,- DM** for early registration (before **June 1, 1991**), and **300,- DM** otherwise.

Although the conference budget is very tight we would like to undertake any effort to offer certain financial help to some colleagues from Eastern European and developing countries in order to support participation in the Congress. Therefore, we would like kindly to ask you to consider a voluntary financial solidarity contribution you may add to the conference fee. This solidarity contribution exclusively will be used to assist conference attendance of colleagues from those countries mentioned above. Every amount is welcome! You may identify your contribution on the enclosed registration form.

Payment of the conference fee (and, in particular, the solidarity contribution if you choose to contribute) in advance would be most welcome. Please, make your cheques payable to

Deutsche Bundesbank (BLZ 86000000), Germany

ACCOUNT no.: 86001853 , Special code no.: 1110138

Please, ensure that your name properly identifies your money transfer. Participants having transferred the conference fee to the above account are kindly requested to send a copy of their order receipt to the Local Organizing Committee.

Participants having not transferred their conference fee by **May 31** are kindly asked to pay the amount due in Leipzig on arrival.

6. FINANCIAL HELP

The Local Organizing Committee has obtained certain funds from the International Union of Pure and Applied Physics which are assigned to assist scientists from developing countries in attending the Congress (IUPAP travel grants). Applicants from developing countries may write to the Local Organizing Committee.
In addition, in dependence on the result of our call for a voluntary financial solidarity contribution as made in the preceding chapter (Registration) of this bulletin the Local Organizing Committee (under assistance by the Scientific Organizing Committee) will hopefully be able to give certain financial support to scientists from Eastern European and developing countries for participating in the conference. Applicants should also write to the Local Organizing Committee.

We shall not be able to offer participants any other financial help (except to invited speakers and session organizers).

7. ACCOMMODATION

Lower price accommodation has provisionally been reserved to the extent of some 300 beds in a students dormitory from July 29 to August 9 inclusive. There, bathroom and shower are available on the floor. The price per night will be about 30 DM for a single room and 50 DM for a double room. From the students dormitory the conference site can be reached by a short walk (about 5 minutes). About one half of the rooms available are double rooms. Therefore, persons intending to share a room should indicate this in the housing reservation form.

It is also possible to book accommodation in one of the hotels in Leipzig, which are equally close to the conference site. A single room (incl. breakfast) will cost 100,- to 150,- DM per night, a double room about 220,- DM per night.

In addition, private accommodation is available the price (incl. breakfast) for which is ranging from about 65,- DM per night for a single room to 85,- DM per night for a double room.

Please, use the enclosed housing reservation form for ordering accommodation. The housing reservation form should reach the Local Organizing Committee not later than **April 30, 1991.** Accommodation for accompanying persons should also be ordered using this form.

If cancellation of your housing reservation is necessary send it to the Local Organizing Committee not later than end of May. Cancellation received after **May 31** may result in charging you the expenses occuring then.

8. MEALS

Meals shall be served at the University Restaurant. The price for a breakfast will be about 5 DM, for lunch 5-8 DM have to be paid usually. The conference site will be at the University main complex located in downtown Leipzig, there are also several restaurants and snacks in the close neighborhood.
There shall be a social gathering in the evening of August 1, the charge for which will be 25,- DM.

9. EXCURSIONS

During the conference excursions will be offered. So far, one tour planned will give opportunity to visit Meißen and Dresden, while the other one will lead to Weimar (Goethe, Schiller museums).

A social program will be set up details of which will be given in the second bulletin.

10. T R A V E L

In general, from abroad Leipzig can be reached best via airplane to Berlin then using railway to Leipzig. From Berlin frequently trains are running to Leipzig. The main railway station in Leipzig is very close to the university.
In recent months, air traffic going directly to Leipzig and to Dresden (which is nearby but not really a better choice than Berlin) has been activated.

11. T H E C I T Y O F L E I P Z I G

Located in a major industrial area Leipzig with its approximately 560 000 inhabitants is one of the largest cities in East Germany. For centuries the University of Leipzig has been an integral part of the city and for long it has exercised wide attraction as a center of higher learning and scientific research.
Around 1165 Leipzig was granted municipal status by Margrave Otto von Meissen. Commerce, music and book-craft have always been closely linked with Leipzig, and established its world-wide fame. There are to visit such famous places as Old Exchange, Old Town Hall, Old Weight House, Auerbachs Keller (Faust legend in the historic cask vault), St. Thomas' Church with Bach Tomb, St. Nikolai Church (the place where the peaceful change of East Germany was initiated), Monument for the Battle of Nations in 1813.
As a musical center Leipzig became known for the Thomas Choir, the Gewandhaus Orchestra, and for its associations with the work of many famous musicians such as Bach, Mendelssohn Bartholdy, Lortzing and Richard Wagner.

A P P E N D I X : CURRENT ADDRESSES OF THE SESSION ORGANIZERS

M Combescure
Université de Paris XI
Centre d'Orsay
Batiment 211
F-91405 Orsay, CEDEX
France

K D Elworthy
Mathematics Institute
University of Warwick
Coventry CV4 7AL
England

V Enß
Institut für Mathematik I
Freie Universität Berlin
D -W-1000 Berlin 33
Germany

J Fritz
Mathematics Institute
Hungarian Academy of Sciences
H-1364 Budapest
Hungary

K Gawedzki
IHES
35, route de Chartres
F-91440 Bures-sur-Yvette
France

I Herbst
Division of Math. Sciences
Room 339
National Science Foundation
1800 G Street, NW
Washington, D.C. 20550
USA

D Iagolnitzer
CEN-Saclay
F-91191 Gif-sur-Yvette, CEDEX
France

Y Kifer
Department of Mathematics
Cornell University
Ithaca, NY 14850
USA

A Kupiainen
Department of Mathemtics
Rutgers University
New Brunswick, NJ 08903
USA

G Neugebauer
Sektion Physik
Fr.-Schiller-Universität Jena
Max-Wien-Platz 1
D - O-6900 Jena
Germany

E Seiler
Max-Planck-Inst. für Physik
Fohringer Ring 6
PF 40 12 12
D -W-8000 München 40
Germany

S B Shlosman
Institute for Information
Transmission Problems
USSR Academy of Sciences
ul. Ermolovoj 19
103051 Moscow
USSR

S L Woronowicz
Department of Math. Methods
in Physics
University of Warsaw
Hoza ul. 74
PL-00-682 Warsaw
Poland

IAMP 1991 - 10th INTERNATIONAL CONGRESS ON MATHEMATICAL PHYSICS

July 30 - August 9, 1991

University of Leipzig, Germany

REGISTRATION FORM

Please return before **April 30, 1991** to:

c/o G Hofmann
NTZ, Universität Leipzig
Augustusplatz 10
D - O-7010 Leipzig
Germany

****

I shall participate in the "10th International Congress on Mathematical Physics" July 30 - August 9,1991, Leipzig.

(please type or use block letters)

Titel		Male	
Name		Female	
First Name			
Institution			

	Permanent Professional Address	Address in July (if different)
Phone Fax Telex E-Mail		

Date of arrival: _____ Date of departure: _____

P.T.O.

CONFERENCE FEE

The conference fee to be paid by each participant will include coverage of a free copy of the Proceedings.

For payment in advance cheques have to be made payable to:

Deutsche Bundesbank (BLZ 86000000), Germany

ACCOUNT no.: 86001853 , Special code no.: 1110138

I will pay the conference fee of **240.- DM**
(note, that the fee for registration after June 1, 1991 will be 300.- DM)

and a voluntary solidarity contribution
(for supporting conference attendance of colleagues from Eastern European and developing countries of) **+ ....- DM**

totalling **= ....- DM**

Date Signature

****

ENTRY VISA

In case you need an entry visa for Germany, please give the following items:

Date of birth:

Place of birth:

Passport no.:

Date of issue:

Place of issue:

Expiration date:

****

Please, pay also attention to the housing reservation form.

IAMP 1991 - 10th INTERNATIONAL CONGRESS ON MATHEMATICAL PHYSICS

July 30 - August 9, 1991

University of Leipzig, Germany

HOUSING RESERVATION FORM

Please return before **April 30, 1991** to:

c/o G Hofmann
NTZ, Universität Leipzig
Augustusplatz 10
D - O-7010 Leipzig
Germany

****

(please type or use block letters)

☐ Male
☐ Female

☐ Age

Name	First Name

Professional address:

****

I require the following housing reservation in Leipzig

from ☐ to ☐

Please check:

☐ I prefer to stay in a hotel.
(about 100-150 DM/night for a single room,
about 220 DM/night for a double room)

☐ I would like a single room.

☐ I would like to share a double room with another participant whose name is:

☐ I will share a double room with another participant assigned by the organizers.

☐ I would like accommodation for myself and the following number ☐ of accompanying persons

(For further specification use comment section below)

P.T.O.

☐ I prefer to stay in a privat accommodation.
(about 65 DM/night for a single room,
about 85 DM/night for a double room)

☐ I would like a single room.

☐ I would like to share a double room with another participant whose name is:

☐ I will share a double room with another participant assigned by the organizers.

☐ I would like accommodation for myself and the following number ☐ of accompanying persons.

(For further specification use comment section below)

☐ I prefer to stay in a students dormitory.
(about 30 DM/night for a single room,
about 50 DM/night for a double room)

☐ I would like a single room.

☐ I would like to share a double room with another participant whose name is:

☐ I will share a double room with another participant assigned by the organizers.

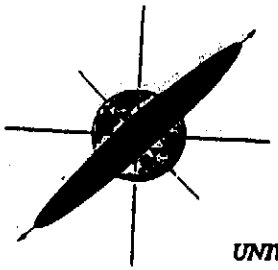
☐ I would like accommodation for myself and the following number ☐ of accompanying persons.

(For further specification use comment section below)

Comment section (special wishes/remarks/requests):

I understand that in the event of cancellation received after May 31, 1991 expenses occuring then may be charged to me.

Date Signature



WORKSHOP ON
SQUEEZED STATES AND
UNCERTAINTY RELATIONS

March 28-30, 1991

UNIVERSITY OF MARYLAND/COLLEGE PARK, MARYLAND

Principal Organizers:

D. Han, Goddard Space Flight Center, Code 936, Greenbelt, MD 20771 (Tel: 301-286-9414, Fax: 301-286-3221),
Y.S. Kim, Dept. of Physics, Univ. of Maryland, College Park, MD 20742 (Tel: 301-405-6024, Bitnet: KIM@UMDHEP, Fax: 301-699-9195, Telex: 90-8787),
W.W. Zachary, Dept. of Electrical Engineering, Howard University, Washington, DC 20059 (Tel: 202-806-6686, Fax: 202-806-5960).

Local Organizing Committee:

D.R. Brill (Univ. of Maryland at College Park), J.D. Franson (Johns Hopkins Univ. Applied Physics Lab), M. Kafatos (George Mason University), P. McGrath (Laboratory for Physical Sciences), H.S. Pilloff (Office of Naval Research), A.K. Rajagopal (Naval Research Laboratory), Y.H. Shih (Univ. of Maryland at Baltimore County).

Invited Speakers:

C. Alley (Univ. of Maryland), H.J. Carmichael (Univ. of Oregon), C.M. Caves (Univ. of Southern California), R.Y. Chiao (Univ. of California, Berkeley), B. DeFacio (Univ. of Missouri), V.V. Dodonov (Lebedev Inst.), J.D. Franson (Johns Hopkins Univ. Applied Physics Lab.), J.B. Hartle (Univ. of California, Santa Barbara), M.Horne (Stonehill College), J.R. Klauder (Univ. of Florida), L. Mandel (Univ. of Rochester), V.I. Man'ko (Lebedev Inst.), M.O. Scully (Univ. of Mexico), J. H. Shapiro (M.I.T.), A.I. Solomon (Open Univ. at Milton Keynes), M. Teich (Columbia Univ.), H. Umezawa (Univ. of Alberta), J.A. Wheeler (Princeton Univ.), E.P. Wigner (Princeton Univ.), H.P. Yuen (Northwestern Univ.), B. Yurke (AT&T Bell Labs).

This Workshop is supported in part by the Office of Naval Research, and by the Goddard Space Flight Center of the National Aeronautics and Space Administration.

The Maryland Academy of Sciences now has the policy of co-sponsoring high-quality scientific meetings held in the state of Maryland. This Workshop is the first meeting co-sponsored by the Academy.

The administration of this Workshop will be in part provided by Westover Consultants, Inc. 6303 Ivy Lane, Suite 416, Greenbelt, MD 20770.

REGISTRATION AND CONTRIBUTED PAPERS

Please return the enclosed registration form by February 1, 1991. There will be a registration fee of $120.00 that will be due by February 1, 1991. Registration fees paid after February 1, 1991 will be $150.00. Registration fees for students will be $60.00, registration fees paid after February 1, 1991 for students will be $75.00. Payment can be made by check or money order only. Please make your check or money order payable to University of Maryland.

If you wish to contribute a poster, please attach the abstract of your paper to your registration form. If your paper contains a significant new result, you may be invited to make an oral presentation.

HOTEL ACCOMMODATIONS

A block of rooms have been reserved at four nearby motels in the College Park area. College Park is within the Greater Washington area. Since this area is a very attractive spot for tourists during the spring months (especially during the cherry blossom weekend), it is essential that you make your motel arrangements before the spring rush. Room arrangements should be made by contacting the motels directly. Information from area motels is enclosed. All motels have a registration cutoff date of February 15, 1991.

AIR TRAVEL

The Baltimore Washington International (BWI) Airport is most convenient, located approximately 30 minutes from the College Park area. The Washington National Airport is approximately 45 minutes and the Dulles International Airport is approximately 1 hour from the College Park area.

The Travel Department, Inc. (TDI) is our official travel agency for the Squeezed States Workshop. Participants may contact the Travel Department, Inc. at (202) 408-0940. After hours you can reach the Travel Department, Inc. at 1-800-524-4500.

When making your reservation, please provide TDI with the meeting name and mention Westover Consultant, Inc. (WCI), as the coordinating company. WCI's policy is to get the most cost-efficient or "cost-saver" fares for its travelers, which may include a stop or connecting service. Therefore, in cooperation with American Airlines, WCI and TDI will offer an exclusive discount on the full coach fares. Reservations must be made and tickets purchased 14 days in advance of travel to be eligible for its discounted fare. All fares are subject to availability, and any applicable restrictions and/or penalties will apply. Please make your air travel arrangements as soon as possible to ensure the best rates. Confirm the address to where the ticket would be sent and specify the date you need the ticket in hand.

SQUEEZED STATES AND UNCERTAINTY RELATIONS
University of Maryland
College Park, Maryland, U. S. A.

March 28-30, 1991

REGISTRATION FORM

Please complete this form, make a photocopy for your own records, and return before February 1, 1991. Please print or type. To register more than one person as a Conference delegate, please duplicate or request additional forms.

NAME: _____

AFFILIATION: _____

DEPARTMENT: _____

ADDRESS: _____

CITY: _____ STATE: _____ ZIP: _____

DAYTIME PHONE NUMBER: _____ FAX NUMBER: _____

TELEX: _____ BITNET: _____

REGISTRATION FEES
(circle amount and fill in blank)

Paid before Feb. 1, 1991	Paid after Feb. 1, 1991		Paid before Feb. 1, 1991	Paid after Feb. 1, 1991	
$120.00	$150.00	*Student Fee:	$60.00	$75.00	*Students must submit proof of their full-time student status with form

TOTAL ENCLOSED $_____

____ Enclosed is a check/money order in US funds payable to University of Maryland.
____ Check or money order mailed separately. (NOTE: Please indicate participants name and affiliation on check or money order.)

CONTRIBUTED PAPERS

If you wish to contribute a poster, please enclose your abstract with this registration form.

Title of your paper: _____
The abstract should include your name and address.

PLEASE RETURN THIS REGISTRATION FORM BY FEBRUARY 1, 1991 to:

Squeezed State Workshop
c/o Westover Consultants, Inc.
6303 Ivy Lane, Suite 416
Greenbelt, Maryland 20770
Telephone: (301) 220-0685
Fax: (301) 345-2742

CANCELLATION POLICY

Refunds of registration fees paid will be granted, less a $20.00 administration fee, until February 28, 1991. Cancellations must be received in writing to the Westover Consultants, Inc. office by this date. Registration fees are nonrefundable after February 28, 1991.

This Workshop is supported in part by the Goddard Space Flight Center of the National Aeronautics and Space Administration, and by the Office of Naval Research

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HOTEL RESERVATION FORM

Workshop on Squeezed States and Uncertainty Relations
College Park, Maryland, U.S.A.
March 28-30, 1991 (Cherry Blossom Weekend)

It is essential that you make your hotel arrangements before the spring rush. Please guarantee your room with a credit card number by phone with the hotel or send this form with the first night's rent directly to the hotel of your choice by February 15, 1991.

NAME: _____

ADDRESS: _____

_____

TELEPHONE: _____

FAX: _____

( ) Single Room ( ) Double Room Number in Party ( )

Check-in Date: _____ *Check-out Date:* _____

Please choose one:

( ) ***University of Maryland Center for Adult Education*** - Rte. 193 (University Boulevard) and Adelphi Road, College Park, MD 20742. Rates per night: US $60.00 single, $65.00 queen, $80.00 double. (Center Accepts: VISA or MC). (301) 985-7300

( ) ***Quality Inn*** - 7200 Baltimore Blvd., College Park, MD 20740 - Within walking distance of the workshop site. Rates per night: $43.00 single, $48.00 double. (Inn accepts AX, VISA, MC). (301) 864-5820

( ) ***Best Western Maryland Inn*** - 8601 Baltimore Boulevard (Rte. 1), College Park, MD 20740. Rates per night: $58.00 single, $63.00 double. (Inn accepts AX, VISA, MC). (301) 474-2800

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( ) *Check or money order enclosed. Please add room tax. Tax rate: 10 percent for motels; 5 percent for Adult Education Center.*

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88 41 63 00
Télex U.L.P. 870260 F

le 11 février 1991

Dans le cadre de la Recherche Coopérative sur Programme n° 25, la

52ième RENCONTRE

entre

PHYSICIENS THÉORICIENS et MATHÉMATICIENS

aura lieu à l'Institut de Recherche Mathématique Avancée de Strasbourg

du 11 au 13 AVRIL 1991

Liste des conférenciers invités :

MM. L. ALVAREZ-GAUMÉ, (Cern, Genève), O. BABELON, (Paris), R. COQUEREAUX, (IHES, Bures-sur-Yvette), A.FLOER, (Bochum), R.GERGONDEY, (Lille), C. KASSEL, (Strasbourg), A. KATZ, (Ecole Polytechnique), M. KONTSEVITCH, (Max-Planck Bonn), Mme Y. KOSMAN-SCHWARZBACH, (Lille), MM. S.MAJID, (Gambridge), G. MALTSINIOTIS, (Paris), V. TURAEV, (Strasbourg), E. VERLINDE, (Utrecht), A. VOROS, (CEN Saclay).

Tous renseignements complémentaires peuvent s'obtenir en écrivant au :

Secrétariat de la R.C.P. N° 25
(Mme Marianne STEPHAN)
7, rue René Descartes
67084 STRASBOURG CEDEX
Tél. 88 41 63 05
Téléfax 88 61 90 69

Daniel BENNEQUIN
Responsable de la R.C.P. N° 25

(Please post and circulate)

NEEDS '91

7th Workshop on Nonlinear Evolution Equations and Dynamical Systems

Baia Verde (Gallipoli, near Lecce), Italy, June 19-29, 1991

The 7th Workshop on Nonlinear Evolution Equations and Dynamical Systems (NEEDS) will take place in Baia Verde (Gallipoli) near Lecce, Italy, from Wednesday June 19 (arrival day) to Saturday June 29 (departure day), 1991. The first six Workshops of this series have taken place in Kolymbari near Chania (Crete) in 1980, again in Kolymbari in 1983, in Gallipoli near Lecce (Italy) in 1985, in Balaruc-les-Bains near Montpellier (France) in 1987, again in Kolymbari in 1989, and in Dubna near Moscow in 1990. They have been reported in Physica 2D, 545-548 (1981), 11D, 389-391 (1984), 29D, 431-436 (1988), and Inverse Problems 3, 775-780 (1987), 5, 667-670 (1989). Proceedings of the 1987 and 1989 Workshops have also been published: "Nonlinear Evolutions", ed. J.P. Léon (World Scientific) and "Nonlinear Evolution Equations and Dynamical Systems" , eds. S. Carillo and O. Ragnisco (Springer-Verlag). The 7th Workshop will follow the same pattern, both in terms of scientific content and organizational structure. Hence it will be interdisciplinary in character; the topics covered will include integrable dynamical systems (nonlinear ODEs and PDEs), near integrable and non integrable model equations, applications in classical and quantal physics (elementary particles, solids, statistical mechanics, fluids, plasmas, etc.) and elsewhere (oceanography, biophysics, etc.). The techniques discussed will range from pure mathematics through numerical computations to applicable theory and experiments.

This Workshop, the seventh of the NEEDS series, will be the first one jointly sponsored by the European Institute for Nonlinear Studies via Transnationally Extended INterchanges (EINSTEIN), now in the process of creation in Lecce, and by the International Institute for Nonlinear Science (IINS), now in the process of creation on the basis of a joint Soviet-American initiative. We anticipate that the NEEDS '91 Workshop will also provide an occasion to discuss the future activities of these two Institutions.

An all inclusive fee of Italian Lire 950,000 (1 US$ is about Lire 1,200) will cover the cost of registration (Italian Lire 120,000), meals and lodging during the Workshop (in double occupancy rooms with private facilities) and the transport from Lecce or Brindisi International Airport to Gallipoli and back (which will be provided by the Organizing Committee for participants arriving on June 19 and leaving on June 29). The all inclusive rate for accompanying persons is Italian Lire 830,000. The Workshop is open to qualified scientists who have contributed to the topics mentioned above. Persons interested in participating should apply as soon as possible (acceptances will be on a first-come first-serve basis), and in any case **before April 10,1991**, by contacting M. Boiti, Dipartimento di Fisica, Universita' di Lecce, via Arnesano, 73100 Lecce, Italy - tel. (Conference Secretary) 0832/620467 and E-Mail: GERARDI@VAXLE.INFN.IT; telex 860128 UNSTLE; fax 0832 620505. **Messages sent by E-mail, if not confirmed in few days, should be sent again using Telex, fax or ordinary mail.**

Participants will be notified about their admittance by April 30, 1991 at the latest (please include in the application form: fax, telex, phone or E-Mail). They will then be provided with further information, and asked to confirm their participation by depositing a non-refundable advance of Italian Lire 120,000 (or US$ 100). The balance of the participation fee will have to be paid upon arrival.

F. CALOGERO

M. BOITI
F. PEMPINELLI
G. SOLIANI

In case you prefere to share your room with a certain participant, please indicate name:

.....

Date of arrival: Wednesday 19th June, 1991
Date of departure: Saturday 29th June 1991

Expected date (and means) of arrival: . .....

Expected date (and means) of departure .....

Please enclose a terse (one page-suitable for direct reproduction) biographical presentation, to be distributed to workshop participants; it should include (at least) the following data:
- Name, professional affiliation, complete addresses, scientific interests (past and present), titles of recent published papers and/or preprints, other interests (scientific or otherwise).

I would like to present:
- long lecture(s) (45 min) ( )
- short lecture(s) (20 min) ( )
- poster(s) ( )

Enclose title and abstract, suitable for direct reproduction, for any lecture or poster you intend to present.

REMARK (if any).....

....

We have been approached by several publishers interested in issuing the Proceedings of this Workshop; we have not yet decided whether or not to accept one of these offers.

Would you be interested to prepare a paper to be published in this Proceedings, if they will be issued?

- YES (a review paper) ( )
- YES (a research paper) ( )
- NO ( )

Date: .....

Signature: .....

This form should be sent to:

Ms. GERARDI MARIA CONCETTA
(Conference Secretary)
Dipartimento di Fisica, Universita di Lecce
Via Arnesano, 73100 LECCE, Italy

Tel. 0832/620467
E-Mail: GERARDI@VAXLE.INFN.IT
Telex 860128 UNSTLE
Fax 0832/620505

NEEDS 91

7th Workshop on Nonlinear Evolution Equations and Dynamical Systems

Baia Verde, Gallipoli (near Lecce), Italy,
June 19-29, 1991

Registration Form

NAME .....

Affiliation .....

.....

Mailing Address .....

.....

.....

Tel. nr. .....

Telex .....

Fax .....

E-Mail Address ..... Network .....

Accompanying person(s), full name:

1) .....

2) .....

3) .....

Special request concerning accomodation .....

.....

The all inclusive fee for participants (see poster for details) is Italian L. 950.000. The all inclusive rate for accompanying persons is L. 830.000. Single room, if available, will be at an extra cost of L. 170.000.

RUHR-UNIVERSITÄT BOCHUM
Fakultät und Institut für Mathematik

Ruhr-Universität Bochum, Fakultät und Institut für Mathematik
Postfach 102148, 4630 Bochum 1

Prof. Dr. S. Albeverio

Universitätsstraße 150
4630 Bochum 1
Postfach 102148
Gebäude NA 3/33
Telefon (0234) 700- 5599
Telefax (0234) 700-2001
Telex 0825860

January 11, 1991

The 3. International Ascona-Locarno Conference "Stochastic processes - geometry and physics" will take place in Locarno 24-29 June 1991.

It is organized by the Research Centre CERFIM, Via F. Rusca 1, Locarno, (Tel. 0041-93 -31 64 24)

A second announcement will be sent by March.

The II International Conference on Algebra
in Honor of A.I.Shirshov (1921-1981)

SECOND ANNOUNCEMENT

Dear Colleague:

The Conference on Algebra will be held at August 20-25, 1991 in Barnaul. The arrival day is August 19.

The Conference is supported by the International Mathematical Union. Its representative appointed is Professor W.Feit.

At present Professors E.Abe, S.Amitsur, R.Artzy, S.Bachmuth, G.Benkart, R.Block, H.Cohn, V.Dlab, J.Ferrar, E.Formanek, F.Gaeta, K.R.Goodearl, D.Happel, M.Hazewinkel, D.R.Hughes, N.Jacobson, F.Kasch, O.Kegel, J.Lambek, S.Mac Lane, L.Makar-Limanov, P.Malcolmson, W.Martindale, M.-P.Malliavin, K.McCrimmon, K.Meyberg, S.Montgomery, H.C.Myung, N.L.Johnson, R.H.Oehmke, J.M.Osborn, A.Pasini, K.Roggenkamp, L.Rowen, A.A.Sagle, L.Small, H.F.Smith, L.Solomon, H.Strade, H.Tachikawa, E.J.Taft showed their interest in participating this conference.

Entertainment program of the conference includes:

- Opening ceremony (and plenary sessions) in the City Drama Theater Palace;
- Reception by Altai Region authorities, russian style - August 20;
- Full day boat travel on the Ob' river with a picnic party - August 22;
- Russian and German folk groups performances, Chamber Music concert;
- One day excursion to a village where a well-known Russian writer V.Shukshin had been born - August 26; or
- Four days Altai Mountains sightseeing tour including 2-hour helicopter-flight to the pearl of the mountains, Teletskiy Lake - August 26/29, or
- Trip to Lake Baikal (by train from Barnaul to Irkutsk), where you may participate the 5-th Siberian School "Algebra and Analysis" (August 27 - September 2).

In the latter case you have to book your return flight from Irkutsk by September 3.

Financial expenses for the participants (per one person):

- registration fee	US $ 50
- hotel (single room) and meals	US $ 200
- hotel and meals for an accompanying person	US $ 100
- hotel and meals for one child	US $ 50
- Teletskiy Lake tour	US $ 100
- Baikal Lake trip (including the registration fee, full board during the School to be held in the immediate vicinity of the Lake and one day Boat Trip on the Lake)	US $ 200

Money should be paid not later than August 1, 1991 at: Hamburger Sparkasse, BLZ 200 505 50, Konto-Nr. 1139784811, Helmut Strade

Please send your reply, including your wish to take part in a particular tour, as soon as possible but at latest by February 1, 1991 to the address: USSR, 630090, Novosibirsk, Institute of Mathematics, Prof.S.A.Syskin.

Rector of the Altai State University
Professor V.L.Mironov

Director of the Institute of Mathematics
Academician M.M.Lavrent'ev

The II International Conference on Algebra in Honour of A.I.Shirshov (1921-1981)

APPLICATION FORM

Full name _____

Address for correspondence _____

_____

_____

Telephone number(s) _____

Your present position _____

_____

Date and place of birth _____

Citizenship _____

Passport number _____

Title and duration of the talk _____

_____

_____

_____

Any request or wishes _____

_____

_____

_____

_____

Signature _____

_____

Send to: Sergei A. SYSKIN, USSR, 630090, Novosibirsk,
Institute of Mathematics

XXIème ECOLE D'ETE DE CALCUL DES PROBABILITES

SAINT-FLOUR (Cantal)

18 Août - 4 Septembre 1991

CONFERENCIERS INVITES

- D.A. DAWSON, Professeur à l'Université Carleton à OTTAWA (Canac
  "Measure Valued Processes"

- B. MAISONNEUVE, Professeur à l'Université de GRENOBLE
  "Processus de Markov"

- J. SPENCER, Professeur au Courant Institute à NEW-YORK (U.S.A.
  "Random Graphs"

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Announcement

The Euler International Mathematical Institute

(LOMI, Fontanka 27, Leningrad 191011, USSR)

First Semester "Quantum Groups"

Autumn 1990

Organising Committee:
L.D. Faddeev, P.P.Kulish, E.K.Sklyanin, L.A.Takhtajan

Scientific Programme:

1. Quantum Groups, Deformation Theory and Representation Theory

October 15-28

Speakers:
L.Biedenharn, E.Celeghini, V.Drinfeld, B.Feigin, M.Gerstenhaber, R.Giachetti, D.Gurevich, M.Karasev, S.Kerov, A.N.Kirillov, A.Klimyk, L.Korogodsky, V.Lyubashenko, Sh.Majid, M.Nazarov, M.Noumi, G.Olshansky, V.Retakh, V.Rubtsov, M.Saveliev, S.Schack, M.Semenov-Tian-Shansky, E.Sklyanin, Ya.Soybelman, J.Stasheff, E.Taft, M.Tarlini, A.Vershik, K.Ueno, S.Woronowicz.

2. Quantum Groups, Symmetries of Dynamical Systems and Conformal Field Theory.

November 12-25

Speakers:
A.Alekseev, I.Arefieva, O.Babelon, R.Bariev, A.Belavin, D.Bernard, M.Chaichian, I.Cherednik, T.Curtright, E.Date, L.D.Faddeev, V.Fateev, V.Fock, J.-L.Gervais, A.Izergin, P. Kulish, A.Leznov, D.Leites, A.Niemi, F.Nijhoff, K.-H.Rehren, A.Reyman, V.Rittenberg, R.Sasaki, R.Schrader, G. Semenoff, E.Sklyanin, F.Smirnov, E.Sorace, A.Semikhatov, I.Todorov, A.Tsuchiya, L.Vaksman, I.Volovich.

3. Quantum Groups, Low-Dimensional Topology and Link Invariants.

December 3-16

Speakers:
L.Breen, D.Fairlie, M.-L.Ge, L.Kauffman, S.Kerov, R.Kirby, A.N.Kirillov, T.Kohno, G.Kuperberg, V.Lyubashenko, K.Millett, K.Mimachi, H.R.Morton, J.Murakami, V.Turaev, O.Viro, M.Wadati.

INTERNATIONAL
QUANTUM STRUCTURES
ASSOCIATION

is a newly formed society for the advancement and dissemination of quantum logics and structures based thereon, in its mathematical, philosophical, physical, and interdisciplinary aspects, including the relevant aspects of

convex structures	empirical logics	fuzzy quantum logics
logico-algebraic structures	operational foundations	orthomodular structures
quantum communication	quantum computation	quantum epistemology
quantum geometry	quantum information	quantum logics
quantum measurement	quantum probability	quantum set theory
quantum statistics	quantum topology	quantum-space-time.

Those interested in the IQSA may communicate with local members of the organizing committee or with the acting secretary.

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L. SZABO, Inst. Theoret. Physics, Eotvos Univ., Puskin u. 5-7, H-1088 Budapest. Telex 225459 ATOMF H.

1991.01.13

P.S. In the first announcement, this association was called "International Quantum Logics Association".

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Telephone 680748; Telegrams: DIAS DUBLIN. Telex: 31687 DIAS EI. EIRMAIL (Dialcom) 74:EIM252
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DOCUMENT LIST 36: Aug.-Dec. 1990

Preprints unless marked * (= not available) or reprints will be sent out to requests as long as supplies are available. Apply to the Secretary

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-24: D. O'CONNOR, & C.R. STEPHENS: Critical phenomena during a dimensional crossover.

-25: D. O'CONNOR, & C.R. STEPHENS: Superconductivity in an external magnetic field as a finite size system.

-26: D. O'CONNOR, & C.R. STEPHENS: Finite size scaling and the renormalization group.

-27: L. O'RAIFEARTAIGH: Axial anomalies.

-28: D. BIRMINGHAM, H.T. CHO, R. KANTOWSKI, & M. RAKOWSKI: Gauge dependence of the Eta-Function in Chern-Simons field theory and the Vilkovisky-DeWitt correction.

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-35: J. MCCONNELL: Molecular coordinate systems for relaxation processes.

-36: * J. MCCONNELL: Arthur William Conway. *More people and places in Irish Science and Technology ed. by C. Mollan, W. Davis, & B. Finucane, Royal Irish Acad. 1990*

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-40: B.K.P. SCAIFE: On the Rayleigh dissipation function for dielectric media. *Appeared in Jn. Molecular Liquids* 43(1989)101-107.

-41: J. MCCONNELL: The interplay of science and culture.

-42: L. O'RAIFEARTAIGH: Short recall of two-dimensional conformal field theory.

-43: L. O'RAIFEARTAIGH: Conformal reduction of WZNW theories and W-algebras.

-44: L. O'RAIFEARTAIGH: Conformal reduction of WZNW theories.

-45: L. O'RAIFEARTAIGH: W-algebras and the embedding of Toda theories in WZNW theories.

-46: L. O'RAIFEARTAIGH: Some hidden aspects of hidden symmetry.

Cont'd over

-47: E. BUFFET, & J.V. PULÉ: Polymers and random graphs.

-48: * J. MCCONNELL: Self-presentation.

-49: N.G. DUFFIELD: Local correlation functions for mean-field dynamical semigroups on C^*-algebras.

-50: D. O'CONNOR, & C.R. STEPHENS: Phase transitions and dimensional reduction.

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-52: J. O'GORMAN, B.J. HAWDON, J. HEGARTY, P. JENKINS, & D.M. HEFFERNAN: Frequency locking, quasiperiodicity and chaos in modulated external cavity injection lasers. *Coherence and quantum optics VI, ed. by J.H. Eberly et al., Plenum Press, New York, 1990.*

-53: P. JENKINS, & D.M. HEFFERNAN: Non-fractal chaos in two dimensional discrete systems.

-54: P. JENKINS, M. DALY, B.J. HAWDON, J. O'GORMAN, & D.M. HEFFERNAN: An introduction to chaos and its characterization. *To appear in Solitons and chaos in optical systems, ed. by H. Morris and D. Heffernan, Plenum, New York, 1991.*

PREPRINTS (RECEIVED IN GAINESVILLE)

NOTE entries for this listing should be addressed to:

John R. Klauder, **IAMP News Bulletin**, Department of Mathematics, University of Florida, Gainesville, FL 32611

B. Champagne, INRS-Télécommunications, Université du Québec, 3 Place du Commerce, Verdun, Québec H3E 1H6, Canada, **W. Hereman**, Department of Mathematical & Computer Sciences, Colorado School of Mines, Golden, CO 80401, and **P. Winternitz**, Centre de recherches mathématiques, Université de Montréal, CP 6128 - A, Montréal (QC) H3C 3J7, Canada,
THE COMPUTER CALCULATION OF LIE POINT SYMMETRIES OF LARGE SYSTEMS

P. A. Clarkson, Department of Mathematics, University of Exeter, Exeter, EX4 4QE, U.K. and **P. Winternitz**, Centre de recherches mathématiques, Université de Montréal, CP 6128 - A, Montréal (QC) H3C 3J7, Canada
NONCLASSICAL SYMMETRY REDUCTIONS FOR THE KADOMTSEV–PETVIASHVILI EQUATION

V. Hussin, P. Winternitz, Centre de recherches mathématiques, Université de Montréal, C.P. 6128, Succursale A, Montréal (Québec), H3C 3J7, Canada and **H. Zassenhaus**, Department of Mathematics, Ohio State University, Columbus, Ohio 43210
MAXIMAL ABELIAN SUBALGEBRAS OF COMPLEX ORTHOGONAL LIE ALGEBRAS

J. Beckers, N. Debergh, Physique théorique et mathématique, Institut de Physique, B.5, Université de Liège au Sart Tilman, B-4000 LIEGE 1, Belgique, **V. Hussin** and **A. Sciarrino**, Centre de recherches mathématiques, Université de Montréal, C.P. 6128–A, Montreal (QC) H3C 3J7, Canada
ON UNITARY LIE SUPERALGEBRAS FROM THE SPIN–ORBIT SUPERSYMMETRIZATION PROCEDURE

P. Winternitz, Centre de Recherches Mathématiques, Université de Montréal, CP 6128–A, Montréal (QC) H3C 3J7 Canada
SYMMETRIES, SINGULARITIES AND EXACT SOLUTIONS FOR NONLINEAR SYSTEMS

GROUP THEORY AND EXACT SOLUTIONS OF PARTIALLY INTEGRABLE DIFFERENTIAL SYSTEMS

J. Beckers, Physique théorique et mathématique, Université de Liège, Institut de Physique au Sart Tilman, B.5, B-4000 Liège 1, Belgique, **L. Gagnon**, Centre d'optique, photonique et laser, Département de physique, Université Laval, Ste-Foy (Québec), GIK 7P4, Canada, **V. Hussin** and **P. Winternitz**, Centre de Recherches Mathématiques, Université de Montréal, C.P. 6128, Succ. "A", Montréal (Québec), H3C 3J7, Canada
SUPERPOSITION FORMULAS FOR NONLINEAR SUPEREQUATIONS

D. Levi, Dipartimento de Fisica, Universita di Roma "La Sapienza", P-le A-Moro 22, Italia and Centre de Recherches Mathématiques Université de Montréal CP 6128 - A, Montréal, Québec, Canada, H3C 3J7 and **P. Winternitz**, Centre de Recherches Mathématiques, Université de Montréal, CP 6128 - A, Montréal, Québec, Canada, H3C 3J7
CONTINUOUS SYMMETRIES OF DISCRETE EQUATIONS

M. Kimbler, Institut de Physique Nicléaire de Lyon IN2P3–NCRS et Université Claude Bernard, F–69622 Villeurbanne Cedex, France and **P. Winternitz**, Centre de Recherches Mathématiques, Université de Montréal, CP 6128–A, Montréal (QC) H3C 3J7 Canada
PERIODICITY AND QUASI–PERIODICITY FOR SUPER–INTEGRABLE HAMILTONIAN SYSTEMS

Michel Lapidus and Carl Pomerance, Department of Mathematics, Boyd Graduate Studies Research Center, The University of Georgia, Athens, Georgia 30602,
THE RIEMANN ZETA–FUNCTION AND THE ONE–DIMENSIONAL WEYL–BERRY CONJECTURE FOR FRACTAL DRUMS

George A. Hagedorn, Department of Mathematics and Center for Transport Theory and Mathematical Physics, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061–0123
TIME–REVERSAL INVARIANCE AND THE TIME–DEPENDENT BORN–OPPENHEIM APPROXIMATION

ELECTRON ENERGY LEVEL CROSSINGS IN THE TIME–DEPENDENT BORN–OPPENHEIMER APPROXIMATION

Mark S. Ashbaugh, Department of Mathematics, University of Missouri, Columbia, MO 65211 and **Rafael D. Benguria**, Facultad de Fisica, P. Universidad Católica de Chile, Avda. Vicuña Mackenna 4860, Casilla 6177, Santiago 22, CHILE
SHARP BOUND FOR THE RATIO OF THE FIRST TWO EIGENVALUES OF DIRICHLET LAPLACIANS AND EXTENTIONS

Vincenzo Grecchi, Dipartimento di Matematica, Università degli Studi di Bologna, I-40127 Bologna, Italy, **Marco Maioli**, Istituto di Matematica, Università degli Studi della Basilicata, I-85100 Potenza, Italy, and **Andrea Sacchetti**, Dipartimento di

Matematica Pura ed Applicata, Universitá degli Studi di Modena, I-41100 Modena, Italy
HORN OF SINGULARITIES FOR THE STARK–WANNIER LADDERS

Ping Feng, Department of Physics, Harvard University, Cambridge, MA 02138, and **Boris Tsygan**, Department of Mathematics, Harvard University, Cambridge, MA 02138
HOCHSCHILD AND CYCLIC HOMOLOGY OF QUANTUM GROUPS

Slawomir Klimer and Andrzej Lesniewski, Harvard University, Cambridge, MA 02138
A NOTE ON ENTIRE CYCLIC COHOMOLOGY OF A FINITE DIMENSIONAL NONCOMMUTATIVE SPACE

A GOLDEN–THOMPSON INEQUALITY IN SUPERSYMMETRIC QUANTUM MECHANICS

PFAFFIANS ON BANACH SPACES

LOCAL RINGS OF SINGULARITIES AND N=2 SUPERSYMMETRIC QUANTUM MECHANICS

Paolo Cotta–Ramusino, Math. Dept., University of North Carolina, Chapel Hill, N.C. 27514 and **Maurizio Rinaldi**, International School for Advanced Studies, Trieste, Italy
ON THE ALGEBRAIC STRUCTURE OF LINK–DIAGRAMS ON A 2–DIMENSIONAL SURFACE

P.A. Faria da Veiga, Department of Mathematics, Harvard University, Cambridge, MA 02138
CONSTRUCTION OF THE GROSS–NEVEU MODEL IN THREE DIMENSIONS

I. M. Gelfand and D. B. Fairlie, Harvard University, Cambridge, MA 02138
THE ALGEBRA OF WEYL SYMMETRISED POLYNOMIALS AND ITS QUANTUM EXTENSION

Steven A. Janowsky, Dept. of Mathematics, Rutgers University, New Brunswick, NJ 08903 and **Jonathan Weitsman**, Dept. of Mathematics, University of California, Berkeley, CA 94720
THE PHASE STRUCTURE OF THE TWO–DIMENSIONAL N=2 WESS–ZUMINO MODEL

N. Reshetikhin, Department of Mathematics, Harvard University, Cambridge, MA 02138
S–MATRICES IN INTEGRABLE MODELS OF ISOTROPICAL MAGNETIC CHAINS, I.

Tristan Hübsch, Harvard University, Mathematics Department, Cambridge, MA 02138
ELUSIVE CONIFOLD COMPACTIFICATIONS

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IRREDUCIBLE INTEGRABLE THEORIES FROM TENSOR PRODUCTS OF CONFORMAL MODELS

Abhay Ashtekar, Physics Department, Syracuse University, NY 13244–1130
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Charles Radin, Mathematics Department, University of Texas, Austin, TX 78712
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A. K. Raina, Theoretical Physics Group, Tata Institute of Fundamental Research, Homi Bhabha Road, Bombay 400 005, India
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[1] Department of Mathematics, Faculty of Science, Tokyo Institute of Technology, Oh-okayama, Megro-ku, Tokyo, 152, Japan.
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Buffet E.[1,2] and Pulé J.V.[2,3], [1]School of Mathematical Sciences, Dublin City University, Glasnevin, Dublin 9, Ireland, [2]School of Theor. Physics, Dublin Inst. for Advanced Studies, 10 Burlington Road, Dublin 4, Ireland, [3]Dept. of Math. Physics, University College, Belfield, Dublin 4, Ireland, DIAS-STP-90-47
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Duffield N.G.[1] and Werner R.F.[1,2], [1]Dublin Inst. for Advanced Studies, 10 Burlington Road, Dublin 4, Ireland, [2]On leave from FB Physik, Universität Osnabrück, Postfach 4469, D-4500 Osnabrück, Germany, DIAS-STP-90-13
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Georgii H.-O., University of Munich, Mathematisches Institut der Universität, Theresienstr. 39, D-8000 München 2, Germany
LARGE DEVIATIONS AND MAXIMUM ENTROPY PRINCIPLE FOR INTERACTING RANDOM FIELDS ON Z^d

Gesztesy F[1], Holden H.[2,3], Saab E.[1], Simon B.[3], [1]Department of Mathematics, University of Missouri, Columbia, MO 65211, [2]Division of Mathematical Sciences, Norwegian Institute of Technology, University of Trondheim, N-7034 Trondheim, Norway, [3]Division of Physics, Mathematics and Astronomy, California Institute of Technology, Pasadena, CA 91125, USA
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Latifi A. and Leon J., address: see above, PM/90-19
ON THE INTERACTION OF LANGMUIR WAVES WITH ACOUSTIC WAVES IN PLASMAS

Leon J., Département de Physique Mathématique, Université Montpellier II, 34095 Montpellier cdx05, France, PM/90-20
BINDING OF NONLINEAR MODES IN DIATOMIC CHAINS

Löffelholz J., Karl Marx University, Department of Physics/NTZ, O-7010 Leipzig, Germany, KMU/NTZ - 08 (1990)
A QUASIMEASURE FOR (QED)$_1$ ON THE CIRCLE AND OS-CONSTRUCTION

Marchiafava S.[1], Rembieliński J.[2], [1]Universita degli Studi di Roma, Dipartamento di Matematica, Piazzale Aldo Moro 2, I-00185 Roma, Italy, [2]University of Łódź, Institute of Physics, Pomorska 149/153, PL-90-236, Preprint IF UŁ 2(47) 1991
QUANTUM QUATERNIONS

Mathur S.D.[1] and Warner N.P.[2], [1]Lyman Laboratory of Physics, Harvard University, Cambridge, MA 02138, [2]Mathematics Department, Massachussetts Institute of Technology, Cambridge, MA 02139, HUTMP 90-B/269, CTP#1880
IRREDUCIBLE INTEGRABLE THEORIES FROM TENSOR PRODUCTS OF CONFORMAL MODELS

Mazel A.E.[1] and Suhov Yu.M.[2,3], [1]Intern. Inst. of Earthquake Prediction Theory and Mathematical Geophysics, USSR Academy of Sciences, Moscow 113556, [2]Inst. for Problems of Information Transmission, USSR Academy of Sciences, GSP-4 Moscow 101447 USSR, [3]Instituut voor Theoretische Fysica, Katholieke Univ. Leuven, Celestijnenlaan 200D, 3030 Leuven, Belgium, Preprint-KUL-TF-90/33
RANDOM SURFACES WITH TWO-SIDED CONSTRAINTS: AN APPLICATION OF THE THEORY OF DOMINANT GROUND STATES

O'Raifeartaigh L., Dublin Institute for Advanced Studies, 10 Burlington Road, Dublin 4, Ireland, DIAS-STP-90-43
CONFORMAL REDUCTION OF WZNW THEORIES AND W-ALGEBRAS

O'Raifeartaigh L., address: see above, DIAS-STP-90-44
CONFORMAL REDUCTION OF WZNW THEORIES

O'Raifeartaigh L., address: see above, DIAS-STP-90-45
W-ALGEBRAS AND THE EMBEDDING OF TODA THEORIES IN WZNW THEORIES

O'Raifeartaigh L., address: see above, DIAS-STP-90-46
SOME HIDDEN ASPECTS OF HIDDEN SYMMETRY

O'Raifeartaigh L.[1], Ruelle P.[1], Tsutsui I.[1], Wipf A.[2], [1]Dublin Institute for Advanced Studies, 10 Burlington Road, Dublin 4, Ireland, [2]Institut für Theoretische Physik, Eidgenössische Technische Hochschule, Hönggerberg, Zürich CH-8093, Switzerland, DIAS-STP-91-03, Febr. 1991
W-ALGEBRAS FOR GENERALIZED TODA THEORIES

O'Raifeartaigh L., Ruelle P., Tsutsui I., address see above, DIAS-STP-91-01, Jan. 1991
QUANTUM EQUIVALENCE OF CONSTRAINED WZNW AND TODA THEORIES

Penrose O., Department of Mathematics, Heriot-Watt University, Riccarton, Edinburgh EH14 4AS, Scotland, to be submitted to J. Stat. Phys.
BOSE-EINSTEIN CONDENSATION IN AN EXACTLY SOLUBLE SYSTEM OF INTERACTING PARTICLES

Petermann U., Leipzig University, NTZ and Department of Informatics, O-7010 Leipzig, Germany
BUILDING IN THEORIES INTO A FIRST-ORDER PROOF PROCEDURE BASED ON THE CONNECTION METHOD

Raina A.K., Theoretical Physics Group, Tata Institute of Fundamental Research, Homi Bhabha Road, Bombay 400 005, India, TIFR/TH/90-40
ANALYTICITY AND THE *b-c* SYSTEM ON A RIEMANN SURFACE WITH ARBITRARY STATISTICS

Rembieliński J., Tybor W., Institute of Physics, University of Łódź, Nowotki 149/153, 90-236 Łódź, Poland, Preprint IF UL 15/90, 1990, 11, 12
INTERACTION OF NOTIVARG WITH EXTERNAL WEYL CURRENT

Rembieliński J., Tybor W., address see above, Preprint IF UL 14/90, 1990, 11, 10
EXTERNAL CURRENT IN THEORY OF NOTIVARG

Reshetikhin N., Department of Mathematics, Harvard University, Cambridge MA 02138, USA, HUTMP 90/B292
S-MATRICES IN INTEGRABLE MODELS OF ISOTROPICAL MAGNETIC CHAINS

Ronveaux A., Belmehdi S. and Marcellan F., Math. Phys., Facultés Universitaires N.D. de la Paix, B-5000 Namur, Belgique
ORTHOGONALITY WITH RESPECT TO THE SUM OF TWO SEMICLASSICAL REGULAR LINEAR FORMS

Ronveaux A., address see above, Nov. 1990
4th ORDER DIFFERENTIAL EQUATIONS AND ORTHOGONAL POLYNOMIAL OF THE LAGUERRE-HAHN CLASS

Sabatier P.C., Département de Physique Mathématique, U.S.T.L., 34095 Montpellier cdx05, France, PM/90-13 May
QUEST OF MULTIDIMENSIONAL NONLINEAR EQUATIONS WITH EXPONENTIALLY CONFINED SOLUTIONS

Sabatier P.C., address: see above, PM/90-26
REMARK ON THE INFORMATIVE CONTENT OF FEW MEASUREMENTS

Simon B., Division of Physics, Mathematics and Astronomy, California Institute of Technology, Pasadena, CA 01125, USA, to appear in the Bulletin of the American Mathematical Society
FIFTY YEARS OF EIGENVALUE PERTURBATION THEORY

Simon B., address see above, to be submitted to Commun. Math. Phys.
ABSENCE OF BALLISTIC MOTION

Simon B., address see above, to be submitted to the Journal of the American Mathematical Society
BEST CONSTANTS IN SOME OPERATOR SMOOTHNESS ESTIMATES

Sochen N., Service de Phys. Théorique de Saclay, Direction des Sciences de la Matière du C.E.A., F-91191 Gif-sur-Yvette cedex, France, S.Ph.T./90-125
INTEGRABLE MODELS THROUGH REPRESENTATIONS OF THE HECKE ALGEBRA

Van Enter A.C.D.[1], Fernández R.[2] and Sokal A.D.[3], [1]Inst. for Theor. Physics, Rijksuniversiteit Groningen, P.O.Box 800, Groningen, The Netherlands, [2]Theoretische Physik, ETH – Hönggerberg, CH-8093 Zürich, Switzerland, [3]Department of Physics, New York University, 4 Washington Place, New York, NY 10003, USA
RENORMALIZATION TRANSFORMATIONS IN THE VICINITY OF FIRST-ORDER PHASE TRANSITIONS: WHAT CAN AND CANNOT GO WRONG

Verbeure A., Instituut voor Theoretische Fysica, Universiteit Leuven, B-3030 Leuven, Belgium, Preprint-KUL-TF-90/15
DYNAMICS OF FIELD FLUCTUATIONS IN THE SCHWINGER MODEL

Yngvason J., Institut für Theoretische Physik, Universität Göttingen, FRG
THOMAS-FERMI THEORY FOR MATTER IN A MAGNETIC FIELD AS A LIMIT OF QUANTUM MECHANICS

Zylka Ch. and Vojta G., Sektion Physik, Universität Leipzig, O-7010 Leipzig, Germany, NTZ-Preprint-Nr. 17/1990
REAL FRACTALS AND MULTIFRACTALS AS FUZZY SETS

Universität Bielefeld
BiBoS
Forschungszentrum
Bielefeld-Bochum-Stochastik

PUBLICATIONS

- Boutet de Monvel-Berthier A., Georgescu V., Mantuoi M.: Locally smooth operators and the limiting absortion principle for N Body Hamiltonians, BiBoS preprint Nr. 433

- Boutet de Monvel-Bethier, Georgescu V.: Graded C^*-Algebras in the N Body problem, BiBoS preprint Nr. 434

- Boutet de Monvel A., Georgescu V.: The method of differential inequalities, BiBoS preprint Nr. 435

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- Blanchard Ph., Krüger T.: Critical parameters and threshold theorems for epidemics dynamical systems on random graphs, BiBoS preprint Nr. 449

INTERNATIONAL ASSOCIATION OF MATHEMATICAL PHYSICS

July, 1991

IAMP

NEWS BULLETIN

Wissenschaftszentrum Nordrhein-Westfalen

INFORMATIONSTAG

DES ARBEITSKREISES

MATHEMATIK IN FORSCHUNG UND PRAXIS

14. Oktober 1991
Berufsinformationszentrum Essen, Berliner Platz 10, 4300 Essen 1

BERUFSFELD MATHEMATIK - STUDIUM UND BERUFSBILD

- Programm -

9.45 Uhr	**Begrüßung** Herr H.-G. Dohle (Direktor des Arbeitsamtes Essen) **Einleitung** Herr Dr. S. Golin (Wissenschaftszentrum NRW)
10.00 Uhr	**Studiengänge Mathematik und Techno- und Wirtschaftsmathematik** - Voraussetzungen zum Studium - Studienverlauf - Studieninhalte - Praktika Herr Prof. Dr. W. Eberhard (Univ.-GH Duisburg)
10.45 Uhr	**Kaffee**
11.00 Uhr	**Berufsfeld Mathematik** - Einstellungskriterien - Berufsalltag - Tätigkeitsfelder - Projektarten - Teamarbeit - Karriereverlauf/Gehälter Herr Dr. H. Mertes (Hoesch AG, Dortmund) Herr Dipl.-Math. W. Griem (Mannesmann Datenverarbeitung GmbH, Ratingen)
12.30 Uhr	**Mittagessen**
13.30 Uhr	**Mathematik in Anwendungen: Konkrete Projektbeispiele** Herr Prof. Dr. M. Jünger (Univ. zu Köln) Herr Prof. Dr. H.G. Bock (Univ. Augsburg)
14.45 Uhr	**Kaffee**
15.00 Uhr	**Trends der Angewandten Mathematik** Herr Prof. Dr. H.G. Bock (Univ. Augsburg)

Das Ende der Veranstaltung ist auf 16.00 Uhr angesetzt.

Eine Teilnahme ist wegen beschränkter Raumkapazität **nur nach vorheriger Anmeldung** im Wissensschafts-zentrum NRW möglich.

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Rücksendung
bis spätestens 19. Juli 1991

Herrn
Dr. Simon Golin
WISSENSCHAFTSZENTRUM
NORDRHEIN-WESTFALEN
Postfach 20 08 07

4000 Düsseldorf 1

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ANMELDUNG

zum S Y M P O S I U M
des Arbeitskreises M A T H E M A T I K I N F O R S C H U N G U N D P R A X I S
am 4. & 5. November 1991
im Freizeithaus Ratingen-West, Erfurter Str. 37 (am Berliner Platz), 4030 Ratingen

An der o.g. Veranstaltung ☐ nehme ich teil.

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☐ ein Abendessen am 4. November 1991 (Preis wird noch bekanntgegeben)

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MONTPELLIER

" RCP 264 "

INTERDISCIPLINARY ASPECTS OF INVERSE PROBLEMS

- 1991 -

in Montpellier - France, Nov. 28 - Dec. 3

Inverse Problems annual meeting :

mathematics,
quantum mechanics,
electromagnetics,
internal & external geophysics,
acoustics .....

and connections with
control theory,
inverse methods,
and nonlinear applications .....

organization

P.C. SABATIER - J. LEON

For information, please write to
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F-34095 Montpellier Cedex 5

Telex USTMONT 490 944 F - Fax (33) 67.54.30.79
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Preliminary announcement

r.c.p. 264

NOVEMBER 28 - DECEMBER 3, 1991 - MONTPELLIER (FRANCE)

rencontre interdisciplinaire

problèmes inverses

Dear colleague,

The annual meeting of R.C.P. 264 on interdisciplinary aspects of Inverse Problems will be held in Montpellier from Wednesday November 28th, 9.00 to Tuesday December 3rd, 18 h.

This well-know Workshop on I.P. has room for 80 participants at most. The usual topics on inverse problems of electromagnetism, quantum mechanics, internal and external geophysics, acoustics, etc... those related to the control of partial differential equations, the inverse method,and its applications to nonlinear partial differential equations, will be represented, and any related topic will be welcome.

We expect already the presence of Professors Bertero, Boiti, Chavent, Defacio, Degasperis, DeMol, Grunbaum, Kunish, Pike, Tabbara and, as it is usual in the present meeting, which takes again its traditional form, we are sure that many other well-known colleagues in the field will attend.

We would like to specially encourage lectures on applied inverse problems. In all cases, we suggest the participants to prepare lectures giving either good reviews (of their own works or others) or new results, keeping in mind the original aspect of this annual meeting : attendants come from various fields, and are gathered because of their common interest in inverse problems. Hence, a special pedagogical effort is necessary.

With our best regards,
J. LEON and P. SABATIER

P.S. - If you plan to come, give as soon as possible to "R.C.P. 264, Laboratoire Physique Mathématique - 34095 Montpellier Cedex 05" the title of your lecture and the time you wish. Each participant should pay a registration fee of 300 FF.

r.c.p. 264

MONTPELLIER (FRANCE) ——— *NOVEMBER 28 - DECEMBER 3, 1991*

rencontre interdisciplinaire

problèmes inverses

PRELIMINARY REGISTRATION

If you intend to participate in this Meeting, please fill in this form and mail it before SEPTEMBER 1st, 1991. Only those who will answer will then get the DEFINITE REGISTRATION FORM (with details, hotel booking ....)

NAME **will participate.**

Institution

Address

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Scientific research field:

Need an invitation letter **YES** ○ **NO** ○

REGISTRATION FEES: 300 FF

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Bielefeld Encounters

in Mathematics and Physics VIII

16. - 20. December 1991

Zentrum für Interdisziplinäre Forschung
der Universität Bielefeld

Scientific Organisation

D. Kastler	S. Albeverio
M. Sirugue-Collin	Ph. Blanchard
D. Testard	L. Streit

INTERNATIONAL MEETING

NONLINEAR BOUNDARY VALUE PROBLEMS IN SCIENCE AND ENGINEERING: ANALYTIC METHODS

- a special interest meeting sponsored by the Australian Mathematical Society.

Dates: Thursday 30 January to Saturday 1 February 1992.
Place: University of Wollongong, New South Wales, Australia.

This meeting precedes the annual Applied Mathematics Conference of the Australian Mathematical Society (Bateman's Bay, New South Wales, beginning Sunday night 2 February). This is one of the few meetings ever held with an emphasis on analytic methods in nonlinear boundary value problems, without focusing on a single area of application. The following have accepted invitations to speak:

C. Rogers (Loughborough), J.R. Philip (Canberra) W.F. Ames (Atlanta)
A. Donato (Messina) R. Ogden (Glasgow), G. Bluman (Vancouver),
A.C. Newell (Tuscon) E.O. Tuck (Adelaide)
A. McNabb and G. Wake (Palmerston North)

Wollongong is 80 km south of Sydney. There are connecting buses and trains from Sydney's international airport. This area is a summertime haven for beach-lovers. Single on-campus rooms have been reserved and hotel accomodation may be arranged upon request. For further information and registration forms, contact the organizers:

Professors P. Broadbridge and J.M. Hill
Department of Mathematics
University of Wollongong
PO Box 1144
Wollongong NSW 2500 Australia
Fax: 042-213262
e-mail: pbroad@its.uow.edu.au

XIX International Colloquium on "Group Theoretical Methods in Physics"

Salamanca (SPAIN), June 29 - July 5, 1992

Chairman

Luis J. Boya, Depto. Fisica Teorica, University of Zaragoza,
50.009 Zaragoza (SPAIN)
Phone: 34-76-554214
Fax: 34-76-567920
e-mail: ICGTMP at cc.unizar.es

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V. Aldaya (University of Valencia), J.A. de Azcárraga (University of Valencia), L.J. Boya (University of Zaragoza), J.F. Cariñena (University of Zaragoza), L.A. Ibort (University of Madrid (Complutense)), M. Lorente (University of Oviedo), J. Mateos (University of Salamanca), M.A. del Olmo (University of Valladolid), M.A. Rodriguez (University of Madrid (Complutense)), M. Santander (University of Valladolid).

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DIFFERENTIAL GEOMETRY and its APPLICATIONS

Elsevier announces the publication of this new journal for 1991 under the editorship of D. Krupka, Department of Mathematics, Masaryk University, Janáckovo nám. 2a, 662 95 Brno, Czechoslovakia.

This journal will publish original research papers and survey papers in differential geometry and in all interdisciplinary areas in mathematics which use differential geometric methods and investigate geometrical structures.

DIFFERENTIAL GEOMETRY and its APPLICATIONS will offer its readers articles on the following main areas:

- differential equations on manifolds
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- local and global differential geometry
- the calculus of variations on manifolds
- topology of manifolds
- mathematical physics.

The subscription price for Volume 1, 1991, 4 issues, will be 290 Dutch guilders, approximately US$ 172.50 including postage. The first issue is expected in June 1991. Full details and a free sample copy can be requested by writing to Elsevier Science Publishers, Attn: M. Haccou, P.O. Box 103, 1000 AC Amsterdam, The Netherlands or at Journal Information Center, 655 Avenue of the Americas, New York, NY 10010, USA.

Amsterdam, 7 March 1991.

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NOTE entries for this listing should be addressed to:

John R. Klauder, **IAMP News Bulletin**, Department of Mathematics, University of Florida, Gainesville, FL 32611

Michel L. Lapidus, Department of Mathematics, Sproul Hall, The University of California, Riverside, CA 92521-0135
SPECTRAL AND FRACTRAL GEOMETRY: FROM THE WEYL-BERRY CONJECTURE FOR THE VIBRATIONS OF FRACTAL DRUMS TO THE RIEMANN ZETA-FUNCTION

Michel L. Lapidus, Department of Mathematics, Sproul Hall, The University of California, Riverside, CA 92521-0135 and **Helmut Maier**, Department of Mathematics, Yale University, 10 Hillhouse Avenue, Box 2155 Yale Station, New Haven, Connecticutt 06520 and Department of Mathematics, Graduate Studies Research Center, The University of Georgia, Athens, Georgia 30602
THE RIEMANN HYPOTHESIS, VIBRATING FRACTAL STRINGS AND THE MODIFIED WEYL-BERRY CONJECTURE

J. Rembieliński and W. Tybor, Institute of Physics, University of Łódź, Nowotki 149/153, 90-236 Łódź, Poland
EXTERNAL CURRENT IN THEORY OF NOTIVARG

INTERACTON OF NOTIVARG WITH EXTERNAL WEYL CURRENT

Stefano Marchiafava, Universita degli Studi di Roma, Dipartamento di Matematica, Piazzale Aldo Moro 2, I-00185 ROMA, and **Jakub Rembieliński**, University of Łódź, Institute of Physics, Pomorska 149/153, PL-90-236
QUANTUM QUATERNIONS

Edward P. Osipov, Department of Theoretical Physics, Insitute for Mathematics, Novosibirsk, 630090, USSR
KAC-MOODY-MALCEV AND SUPER-KAC-MOODY-MALCEV ALGEBRAS

T. Brzeziński, University of Łódź, Institute of Mathematics, Łódź, ,ul. Branaha 22, **H. Dabrowski**, and **J. Rembieliński**, University of Łódź, Institute of Physics, Łódź, ul. Pomorsak 149/153 PL-90-236
ON THE QUANTUM DIFFERENTIAL CALCULUS AND THE QUANTUM HOLOMORPHICITY

Zbigniew Oziewicz, Institute of Theoretical Physics, Wrocław University, plac Dabrowszczaków 38, PL 50 204 Wrocław Poland
AN INTRODUCTION TO NONCOMMUTATIVE SYMPLECTIC GEOMETRY

ON SCHOUTEN–NIJENHUIS AND FROLICHER–NIJENHUIS LIE MODULES IN NONCOMMUTATIVE DIFFERENTIAL GEOMETRY

Ola Bratteli, Institute of Mathematical Sciences, University of Trondheim, N-7034 Trondheim - NTH, Norway, **George A. Elliott**, Department of Mathematics, University of Toronto, Toronto, Canada M5S 1A1 and Mathematics Insitute, Universitetsparken 5, DK-2100 Copenhagen Ø, Denmark, **David E. Evans**, Department of Mathematics, University College of Swansea, Swansea SA2 8PP, Wales, U.K., and **Akitaka Kishimoto**, Department of Mathematics, Hokkaido University, Sapporo, 060 Japan
ON THE CLASSIFICATION OF INDUCTIVE LIMITS OF INNER ACTIONS OF A COMPACT GROUP

Giovanni M. Cicuta, Dipartimento di Fisica, Universitá di Bari and INFN, Sezione di Bari, Via Amendola 173, 70126, Bari and **Francesco Massari**, Dipartimento di Fisica, Universitá di Bari, Via Amendola 173, 70126 Bari
R.V.B. STATES ON STRIPS

William G. Faris, Department of Mathematics, University of Arizona, Tucson, Arizona 85721
SPIN CORRELATION IN STOCHASTIC MECHANICS

A LOCALIZATION PRINCIPLE FOR MULTIPLICATIVE PERTURBATIONS

LOCALIZATION ESTIMATES FOR A RANDOM DISCRETE WAVE EQUATION AT HIGH FREQUENCY

S. Giler, Institute of Physics, University of Lódź. Nowotki 149/153, 90 236 Łódź, Poland
BALAIN - BLOCH REPRESENTATION, SEMICLASSICAL EXPANSIONS AND BOREL SUMMABILITY IN ONE-DIMENSIONAL QUANTUM MECHANICS I. GENERAL RESULTS

BALIAN - BLOCH REPRESENTATION, SEMICLASSICAL EXPANSIONS AND BOREL SUMMABILITY IN ONE - DIMENSIONAL QUANTUM MECHANICS II. TOPOLOGICAL EXPANSIONS

R. Jagannathan. The Institute of Mathematical Sciences, C.I.T. Campus, Tharamani P.O., Madras - 600113, India
QUANTUM THEORY OF ELECTRON LENSES BASED ON THE DIRAC EQUATION

Gerald Kaiser, Mathematics Department, University of Lowell, Lowell, MA 01854
AN ALGEBRAIC THEORY OF WAVELETS. I. OPERATIONAL CALCULUS AND COMPLEX STRUCTURE

GENERALIZED WAVELET TRANSFORMS I. THE WINDOWED X-RAY TRANFORM

GENERALIZED WAVELET TRANSFORMS II. THE MULTIVARIATE ANALYTIC-SIGNAL TRANSFORM

QUANTUM PHYSICS RELATIVITY, AND COMPLEX SPACETIME

Fumio Hiai, Department of Mathematics, Ibaraki University, Mito, Ibaraki 310, Japan and **Dénes Petz**, Mathematical Institute, Hungarian Academy of Sciences, 1364 Budapest, P.O. Box 127, Hungary
THE PROPER FORMULA FOR RELATIVE ENTROPY AND ITS ASYMPTOTICS IN QUANTUM PROBABILITY

Masanori Ohya, Department of Information Sciences, Sciences University of Tokyo, Noda City, Chiba 278, Japan and **Dénes Petz**, Mathematical Institute of the Hungarian Academy of Sciences, H-1364 Budapest, PF. 127, Hungary
NOTES ON QUANTUM ENTROPY

R. de la Llave, Math Dept., Univ. of Texas, Austin, TX 78712
SMOOTH CONJUGACY AND S-R-B MEASURES FOR UNIFORMLY AND NON–UNIFORMLY HYPERBOLIC SYSTEMS

Preprints received in Kyoto

Aldaya V. [1], Bisquert J. [2], Loll R. [3] and Navarro-Salas [4], IFIC (Centro Mixto Universidad de Valencia, Burjasot 46100 Valencia, Spain, (1) Departamento de Fisica Teorica y del Cosmos, Facultad de Ciencias, Granada, Spain, (2) Departamento de Fisica, Escuela Universidad Politecnica, Universidad Castilla-La Mancha, 02071 Albacete, Spain, (3) Physicalisches Institut der Universität Bonn, Nussallee 12, D-5300 Bonn 1, (4) Departamento de Fisica Teorica, Facultad de Fisicas, Universidad de Valencia, Burjassot 46100 Valencia, Spain

Symmetry and Quantization : Higher Order Polarization and Anomalies

Arai A., Department of Mathematics, Hokkaido University, Sapporo 060 Japan, to appear in J. Math. Phys.

A Theorem on Essential Self-adjointness with Application to Hamiltonians in Non-relativistic Quantum Field Theory

Arai A., address : see above, to appear in J. Math. Anal. Appl.

An Abstract Sum Formula and its Applications to Special Functions

Arai A. and Ogurisu O., address : see above, to appear in J. Math. Phys.

Meromorphic N=2 Wess-Zumino supersymmetric quantum mechanics

Izumi M., Research Institute for Mathematical Sciences, Kyoto University, Kyoto 606 Japan, to appear in Publ. RIMS

Some Results on Classification of Subfactors

Izumi M. and Kawahigashi Y, Dept. Math., Fac. Sci., Univ. Tokyo, Hongo, Tokyo 113 Japan, (1) see above.

Classification of Subfactors with the Principal Graph $D_n^{(1)}$

Osipov E.P., Dept. Theor. Phys., Inst. for Math., Novosibirsk, 630090 USSR

Kac-Moody-Malcev and Super Kac-Moody-Malcev Algebras

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A Method of Finding Thermal Average by Differential Operation

PREPRINTS RECEIVED IN BIELEFELD

Amaro J.M.G[1], Patrick A.E.[2,3], Zagrebnov V.A.[2,4], [1]INSEAD, Boulv. de Constance, F-77305 Fonteinebleau, France, [2]Lab. of Theor. Physics, Joint Inst. for Nuclear Research, Dubna 141 980, USSR, [3]present addr.: Dublin Inst. for Advanced Studies, 10 Burlington Road, Dublin 4, Ireland, [4]present addr.: Katholieke Univ. Leuven, Inst. voor Theor. Fysica, Celestijnenlaan 200D, 3001 Heverlee, Belgium; DIAS-STP-91-16
RANDOM INFINITE-VOLUME GIBBS STATES FOR THE CURIE-WEISS RANDOM FIELD ISING MODEL

Aubry N.[1], Guyonnet R., Lima R., [1]Benjamin Levich Inst. and Dept. of Mech. Engineering, The City College of the City, University of New York, New York, NY 10031, USA, CNRS Luminy - Case 907, CPT, F-13288 Marseille Cedex 9, France; CPT-91/PE.2531, April 1991
SPATIO-TEMPORAL SYMMETRIES AND BIFURCATIONS VIA THE BI-ORTHOGONAL DECOMPOSITION

Audretsch J., Lämmerzahl C., Fakultät für Physik der Universität Konstanz, Postfach 5560, D-7750 Konstanz, Germany; will be publ. in Journ. of Math. Physics.
REASONS FOR A PHYSICAL FIELD TO OBEY LINEAR PARTIAL DIFFERENTIAL EQUATIONS

Audretsch J., Lämmerzahl C., address see above; will be publ. in Journ. of Math. Physics
ESTABLISHING THE RIEMANNIAN STRUCTURE OF SPACE-TIME BY MEANS OF LIGHT RAYS AND FREE MATTER WAVES

Bauer M.[1], Di Francesco Ph.[2], Itzykson C.[3], Zuber J.-B.[3], [1]Serv. de Phys. Theor. de Saclay, F-91191 Gif-sur-Yvette cedex, France, [2]Joseph Henry Lab., Princeton University, Princeton, N.J. 08544, USA, [3]Service de Phys. Theor. de Saclay, F-91191 Gif-sur-Yvette, France; SPhT/91-030, PUPT-1245
COVARIANT DIFFERENTIAL EQUATIONS AND SINGULAR VECTORS IN VIRASORO REPRESENTATIONS

Bauer M., Di Francesco Ph., Itzykson C., Zuber J.-B., address see above; SPhT/91-020, 2/1991
SINGULAR VECTORS OF THE VIRASORO ALGEBRA

Beckers J. and Debergh N., Phys. Theor. et Math., Inst. de Physique, B.5, Université de Liège, B-4000 Liege 1, Belgium
LIE STRUCTURES IN PARASUPERSYMMETRIC QUANTUM MECHANICS: I. THE STANDARD SUPERSYMMETRIZATION PROCEDURE

Beckers J. and Debergh N., address see above
LIE STRUCTURES IN PARASUPERSYMMETRIC QUANTUM MECHANICS: II. THE SPIN-ORBIT COUPLING SUPERSYMMETRIZATION PROCEDURE

Beckers J. and Debergh N., address see above
ON PARTNER POTENTIALS IN PARASUPERSYMMETRIC QUANTUM MECHANICS

Beckers J. and Debergh N., address see above
ON THE SYMMETRIES OF RELATIVISTIC SPIN ONE-HALF PARTICLE EQUATIONS

Benguria R.[1], Hoops St.[2] and Siedentop H.[2], [1]Facultad de Física, P. Universidad Católica de Chile, Acda. Vicuña Mackenna 4860, Casilla 6177, Santiago 22, Chile, [2]Dept. of Mathematics, University of Alabama at Birmingham, Birmingham, AL 35294, USA; March 11, 1991
BOUNDS ON THE EXCESS CHARGE AND THE IONIZATION ENERGY FOR THE HELLMANN-WEIZSÄCKER MODEL

Bijtebier J. and Broekaert J., Theor. Natuurkunde, Fakulteit der Wetenschappen, Vrije Universiteit Brussel, Pleinlaan 2, 1050 Brussel, Belgium; Preprint VUB/TENA/91/04
THE TWO-BODY PLUS POTENTIAL PROBLEM BETWEEN QUANTUM FIELD THEORY AND RELATIVISTIC QUANTUM MECHANICS (TWO-FERMION AND FERMION-BOSON CASES).

Bijtebier J. and Broekaert J., address see above, Preprint VUB/TENA/91/03
THE TWO-BODY PLUS POTENTIAL PROBLEM BETWEEN QUANTUM FIELD THEORY AND RELATIVISTIC QUANTUM MECHANICS (SPINLESS CASE).

Borgs C.[1] and Imbrie J.Z.[2], [1]Inst. für Theor. Physik, Freie Universität Berlin, Arnimallee 14, D-1000 Berlin 33, Germany, [2]Dept. of Math. and Physics, Harvard University, Cambridge, MA 02138, USA
FINITE-SIZE SCALING AND SURFACE TENSION FROM EFFECTIVE ONE DIMENSIONAL SYSTEMS

Borgs C. and Janke W., address see above [1]
A NEW METHOD TO DETERMINE FIRST-ORDER TRANSITION POINTS FROM FINITE-SIZE DATA

Briggs K.M.[1], Quispel G.R.W.[1], Thompson C.J.[2], [1]Dept. of Math., La Trobe University, Bundoora, Victoria, Australia 3083, [2]Dept. of Math., Melbourne University, Parkville, Victoria, Australia 3052, Mathem. Res. Paper No. 91-5, March 1991
FEIGENVALUES FOR MANDELSETS

Capel H.W.[1], Nijhoff F.W.[2], Papageorgiou V.G.[2], Quispel G.R.W.[3], [1]Inst. voor Theor. Fysica, Univ. van Amsterdam, Valckenierstraat 65, 1018 XE Amsterdam, The Netherlands, [2]Dept. of Math. and Comp. Science and Inst. for Nonlinear Studies, Clarkson University, Potsdam, NY 13699-5815, USA, [3]Dept. of Mathematics, La Trobe University, Bundoora, Victoria 3083, Australia; to appear in: F. Lambert (ed.), Solitons and Chaos (Springer, 1991)
INTEGRABLE MAPPINGS AND SOLITON LATTICES

Chaichian M.[1], Smilga A.V.[2], CNRS Luminy , Case 907, CPT, F-13288 Marseille Cedex 9, France, [1]perm. address: Dept. of High Energy Physics, Univ. of Helsinki, Siltavuorenpenger 20C, SF-00170 Helsinki, Finland, [2]Inst. f. Theor. Physik, Univ. Bern, Sidlerstraße 5, CH-3012 Bern, Switzerland; April 1991, CPT-91/P.2536
HOW TO BREAK *R*-PARITY?

Chiappetta P., Deliyannis M. and Tardioli H., CNRS Luminy, Case 907, CPT, F-13288 Marseille Cedex 09, France; April 1991, CPT-91/P.2526
PRODUCTION OF RIGHT NEUTRAL GAUGE BOSONS FROM SUPERSTRING INSPIRED E_6 MODELS

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ELEMENTARY FERMIONS AND *SU*(2 | 1) REPRESENTATION

De Azcárraga J.A., Izquierdo J.M. and Townsend P.K., Deptt. de Fisica Teórica and IFIC (CSIC), Universidaad de Valencia, 46100-Burjasot (Valencia), Spain; FTUV 91-27, IFIC 91-24, June, 1991
A KALUZA-KLEIN ORIGIN FOR THE SUPERSTRING TENSION

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CLASSICAL ANOMALIES OF SUPERSYMMETRIC EXTENDED OBJECTS

Dolan B.P., Dept. of Math. Physics, St. Patrick's College, Maynooth, Ireland and School of Theor. Physics, Dublin Inst. for Advanced Studies, 10 Burlington Road, Dublin 4, Ireland; DIAS STP 91-05
THERMAL SPECTRA IN THE EARLY UNIVERSE

Dorren H.J.S. and A. Tip, FOM Inst. voor Atoom- en Molecuulfysica, Kruislaan 407, 1098 SJ Amsterdam, the Netherlands, March 27, 1991
MAXWELL'S EQUATIONS FOR NON-SMOOTH MEDIA; FRACTAL-SHAPED AND POINTLIKE OBJECTS.

Duclos P.[1] and Exner P.[2], [1]Centre de Physique Théorique, CNRS, F-13288 Marseille-Luminy, [2]Nuclear Physics Inst., CSAS, CS-25068 Rez near Prague, CSFR, SFB 237 - Preprint Nr. 109, Inst. für Math., Ruhr-Universität Bochum, März 1991
CURVATURE VS. THICKNESS IN QUANTUM WAVEGUIDES

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ASSOCIATIVE MEMORY FOR PATTERNS WITH DIFFERENT BIAS

Englisch H.[1,2], [1]address see above and [2]Physics Dept., Huazhong University of Science and Technology, Wuhan, Hubei 430074, P.R. China; NTZ-Preprint-Nr. 11/1991
THE CRITICAL EXPONENT $\nu_\perp$ OF DIRECTED TSAW AND TSALF ON SIERPINSKI CARPETS: AN ANALYTIC APPROACH

Englisch H.[1], Xiao Y.[2], Yao K.[2], address see above [1] + [2]; NTZ-Preprint-Nr. 13/1991
STRONGLY DILUTED NETWORKS WITH SELFINTERACTION

Englisch, H.[1,3], Xiao Y.[1], Yao K.[1,2], [1]Huazhong Univ. (see above), [2]China Center for Theoretical Physics, CCAST (world laboratory), P.O.Box 8730, Beijing, P.R. China, [3]Universität Leipzig (see above); NTZ-Preprint-Nr. 12/1991
NEURAL NETWORKS AS PERPETUAL INFORMATION GENERATORS

Eyink G.L. and Spohn H., Theoretische Physik, Universität München, Theresienstr. 37, D-8000 München 2, Germany
SPACE-TIME INVARIANT STATES OF THE IDEAL GAS WITH FINITE NUMBER, ENERGY AND ENTROPY DENSITY

Exner P., SFB 237, Institut für Mathematik, Ruhr-Universität Bochum, Preprint Nr. 110, März 1991
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Fannes M.[1,2], Nachtergaele B.[3,4] and Werner R.F.[5], [1]Inst. Theor. Fysica, Universiteit Leuven, Belgium, [2]Bevoegdverklaard Navorser, N.F.W.O., Belgium, [3]Depto de Fisica, Univ. de Chile, Casilla 487-3, Santiago de Chile, [4]Onderzoeker I.I.K.W., Belgium, on leave from Univ. Leuven, [5]Fachb. Physik, Universität Osnabrück, PF 4469, Osnabrück, Germany; Preprint KUL-TF-91/9
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Fannes M.[1,2], Nachtergaele B.[1,4] and Werner R.F.[5], address see above; KUL-TF-91/21
GROUND STATES OF VBS MODELS ON CAYLEY TREES

Filk Th., Fakultät für Physik, Universität Freiburg, Hermann-Herder-Str. 3, D-7800 Freiburg, Germany; University of Freiburg, May 1991, THEP 91/7
MULTIMATRIX MODELS RELATED TO THE QUANTUM PLANE ALGEBRA

Ghez J.-M[1] and Vaienti S., CNRS Luminy, Case 907, CPT, F-13288 Marseille Cedex 9, France, [1]PHYMAT, Dept. de Math., Univ. de Toulon et du Var, 83957 La Garde Cedex, France; March 1991, CPT-91/P.2525
RIGOROUS WAVELET ANALYSIS FOR MULTIFRACTAL SETS

Gielerak R.[1] and Zagrebnov V.A.[2], [1]Inst. of Theor. Physics, Univ. of Wroclaw, Cybulskiego 36, 50-205 Wroclaw, Poland, [2]Inst. voor Theoretische Fysika, Univ. Leuven, B-3001 Leuven, Belgium; Preprint-KUL-TF-91/25
ANALYTICITY AND INDEPENDENCE ON THE CLASSICAL BOUNDARY CONDITIONS OF THE INFINITE VOLUME THERMAL KMS STATES FOR A CLASS OF CONTINUOUS SYSTEMS: I. THE MAXWELL-BOLTZMANN STATISTICS CASE.

Höfer K.-W., Fakultät für Physik der Universität Freiburg, Hermann-Herder Str. 3, D-7800 Freiburg i.Br., Germany; University of Freiburg, May 1991, THEP 91/6
DIFFERENTIAL GEOMETRY ON FRACTAL SPACE-TIME

Janke W. and Nather K., Institut für Theoretische Physik, Freie Universität Berlin, Arnimallee 14, D-1000 Berlin 33, Germany; FUB-HEP 7/91
NUMERICAL EVIDENCE FOR KOSTERLITZ-THOULESS TRANSITION IN THE 2D XY VILLAIN MODEL

Joye A.[1], Mileti G.[1], Pfister Ch.-Ed.[2], [1]Dept. de Phys., Ecole Polytechnique Federale de Lausanne, CH-1015 Lausanne, Switzerland, [2]Dept. de Math., Ecole Polytechnique ...; May 16, 1991
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Karner G., Institut für Mathematik, Ruhr-Universität Bochum, D-4630 Bochum, Germany; SFB 237 - Preprint Nr. 102, Jan. 1991
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RIGOROUS COMPUTATION OF PERIOD FOR A POINT VORTEX IN PLANAR INVISCID MOTION AROUND A PROFILE OF ZOUKOWSKI'S TYPE

Maassen H., Mathematics Institute, University of Nijmegen, The Netherlands; to appear in Journ. Funct. Anal.
ADDITION OF FREELY INDEPENDENT RANDOM VARIABLES

Majewski W.A., Institute of Theoretical Physics and Astrophysics, University of Gdansk, Pl-80-952 Gdansk, Poland
ON THE ENTROPIC PROPERTIES OF THE FORD - KAC - MAZUR MODEL

Marion J., CNRS Luminy, Case 907, CPT, F-13288 Marseille Cedex 9, France; May 1991, CPT-91/P.2543
INDUCTION–UNITARIZATION PROCESS FOR NON–LOCALLY COMPACT TOPOLOGICAL GROUPS

Osipov E.P., Department of Theoretical Physics, Institute for Mathematics, Novosibirsk, 630090, USSR; No. 26 (181)
KAC-MOODY-MALCEV AND SUPER-KAC-MOODY-MALCEV ALGEBRAS

Jorgensen P.A.T.[1], Price G.L.[2], [1]University of Iowa, Iowa City, IA 52242, [2]U.S. Naval Academy, Annapolis, MD 21402
INDEX THEORY AND SECOND QUANTIZATION OF BOUNDARY VALUE PROBLEMS

Jorgensen P.E.T.[1] and Powers R.T.[2], [1]University of Iowa, Iowa City, IA 52242, [2]University of Pennsylvania, Philadelphia, PA 19104
POSITIVE ELEMENTS IN THE ALGEBRA OF THE QUANTUM MOMENT PROBLEM

Jorgensen P.E.T., Division of Mathematical Sciences, address see above
INTERTWINING OPERATORS, DERIVATIONS OF THE CAR-ALGEBRA; AND REPRESENTATIONS OF U(p,q)

Patrick A.E.[1,2] and Zagrebnov V.A.[1], [1]Lab. of Theoretical Physics, Joint Institute for Nuclear Research, Dubna 141980, USSR, [2]Dublin Inst. for Advanced Studies, 10 Burlington Road, Dublin 4, Ireland; DIAS-STP-91-10
A PROBABILISTIC APPROACH TO PARALLEL DYNAMICS FOR THE LITTLE-HOPFIELD MODEL

Pillet C.-A., Dept. de Physique Theorique, Universite de Geneve, CH-1211 Geneva 4, Switzerland; UGVA-DPT 1991/05-721
STABILITY OF NEEDLE-CRYSTALS IN THE SYMMETRIC MODEL OF SOLIDIFICATION

Quispel G.R.W.[1], Capel H.W.[2], Papageorgiou V.G.[3] and Nijhoff F.W.[3], [1]Dept. of Mathematics, La Trobe University, Bundoora, Victoria 3083, Australia, [2]Inst. voor Theoretische Fysica, Univ. van Amsterdam, Valckenierstraat 65, 1018 XE Amsterdam, The Netherlands, [3]Dept. of Mathematics and Computer Science and Inst. for Nonlinear Studies, Clarkson University, Potsdam N.Y. 13676, USA; Math. Research Paper No. 91-4, Febr. 1991
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AN ALGEBRAIC GEOMETRY STUDY OF THE b-c SYSTEM WITH ARBITRARY TWIST FIELDS AND ARBITRARY STATISTICS

Roberts J.A.G.[1], Post T.[1], Capel H.W.[1] and Quispel G.R.W.[2], [1]address see above, [2]Department of Mathematics, La Trobe University, Bundoora, Victoria 3083, Australia; to appear in: F. Lambert (ed.), Solitons and Chaos (Springer, 1991)
CONSERVATIVE VERSUS REVERSIBLE DYNAMICAL SYSTEMS

Robinson P. and Maassen H., Department of Mathematics, Catholic University, Toernooiveld, 6525 ED Nijmegen, The Netherlands; Report 9025, May 1990
QUANTUM STOCHASTIC CALCULUS AND THE DYNAMICAL STARK EFFECT

Saveliev M.V.[1] and Sorba P.[2], [1]Institute for High Energy Physics, Protvino 142284, Moscow region, USSR [2]Lab. d'Annecy-le-Vieux de Physique des Particules, IN2P3-CNRS, BP 110, F-74941 Annecy-le-Vieux Cedex, France; LAPP-TH-324/90
SOLUTION OF THE CAUCHY PROBLEM FOR A CONTINUOUS LIMIT OF THE TODA LATTICE AND ITS SUPEREXTENSION

Saveliev M.V., address see above [1]; IHEP 91-28, subm. to Phys. Lett A
ON SPECIALIZING THE BROCKETT EQUATION FOR NONABELIAN VERSIONS OF THE GENERALIZED TODA LATTICES

Schäper U., Fakultät für Physik der Universität Freiburg, Hermann-Herder-Str. 3, D-7800 Freiburg i. Br., Germany; March 1991, THEP 91/3
GEOMETRY OF LOOP SPACES. I. A KALUZA-KLEIN TYPE POINT OF VIEW

Tchrakian D.H.[1,2] and Chakrabarti A.[3], [1]Centre de Physique, Ecole Polytechnique, F-91128 Palaiseau Cedex, France, [2]Department of Mathematical Physics, St. Patrick's College, Maynooth, Ireland, [3]School of Theoretical Physics, Dublin Institute for Advanced Studies, 10, Burlington Road, Dublin 4, Ireland; DIAS-STP 90/34
HOW OVERDETERMINED ARE THE GENERALIZED SELFDUALITY RELATIONS?

Vaienti S., CNRS Luminy, Case 907, CPT, F-13288 Marseille Cedex 9, France; April 1991, CPT-91/P.2527
ERGODIC PROPERTIES OF THE DISCONTINUOUS SAWTOOTH MAP

Van Enter A.C.D.[1] and Miekisz J.[2], [1]Inst. for Theor. Physics, University of Groningen, P.O.Box 800, Groningen, The Netherlands, [2]Inst. de Phys. Theor., Univ. Catholique de Louvain, Chemin du Cyclotron, 2, D-1348 Louvain-la-Neuve, Belgium; June 5, 1991
HOW SHOULD ONE DEFINE A (WEAK) CRYSTAL?

Zhongmin Quian and Guoqiang Wei, East China Normal University, Shanghai
CONDITIONAL DIFFUSION PROCESSES IN A SMALL TIME INTERVAL

Zuber J.-B., Service de Physique Theorique de Saclay, Centre d'etudes de Saclay, 91191 Gif-sur-Yvette Cedex, France; SPhT/91-052
KdV AND W-FLOWS

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- Albeverio S., Fenstad J.R., Høegh-Krohn R., Karwowski W., Lindstroemm T.: Schrödinger operators with potentials supported by null sets, BiBoS preprint Nr. 470

INTERNATIONAL ASSOCIATION OF MATHEMATICAL PHYSICS

To President of International Association of Mathematical Physics:

Professor Arthur Jaffe
Physics Department
Harvard University
Cambridge MA 02138, USA

The two undersigned recommend

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as a member of International Association of Mathematical Physics:

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INTERNATIONAL ASSOCIATION OF MATHEMATICAL PHYSICS

To President of International Association of Mathematical Physics:

The undersigned expresses the wish to become a member of the International Association of Mathematical Physics (IAMP):

Family Name: .....

First Name: .....

Address: .....

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Position: .....

Academic Title: .....

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(Place, Date)

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(Signature)

Streit L., BiBoS, Univ. Bielefeld, D 4800 Bielefeld and Universidade da Madeira, P 9000 Funchal, Madeira.
The Characterization Theorem for Hida Distributions. Generalizations and Applications

Tchrakian D.H. [1,2] Müller-Kirsten H.J.W.[3], [1]Department of Mathematical Physics, St. Patrick's College, Maynooth, Ireland. [2]School of Theoretical Physics, Dublin Institute for Advanced Studies, 10 Burlington Road, Dublin 4, Ireland. [3]Department of Physics, University of Kaiserslautern, Postfach 3049, D-6750 Kaiserslautern, Germany.
KL-TH-91/9
DIAS-STP-91-27
A(2+1)-Dimensional Model with Instanton and Sphaleron Solutions

INTERNATIONAL ASSOCIATION OF MATHEMATICAL PHYSICS

IAMP NEWS BULLETIN

DECEMBER 1991

INTERNATIONAL ASSOCIATION OF MATHEMATICAL PHYSICS

Arthur Jaffe, President
Department of Mathematics
Harvard University
One Oxford Street
Cambridge, MA 02138

Yakov Sinai, Vice President
Aubrey Truman, Secretary
Gerard Emch, Treasurer

LETTER FROM THE PRESIDENT

On behalf of all members of IAMP, I would like to thank the retiring officers for their contribution to our Association. John Klauder made my job possible by handing over his position with a well-planned Leipzig Congress and much welcomed advice. Phillipe Blanchard not only served as willing Secretary, but also continued this summer when we needed him. Serge Novikov had played such an important role in bringing Soviet participants to IAMP Congresses. We are indebted to them, as well as to all the members of the Executive Committee and to all members who have helped.

It is clear that we need to encourage all persons interested in mathematical physics to join IAMP. It is especially important for younger members of the community to join. It was striking that only about 1/3 of the 425 participants in the Leipzig Congress were members. In fact, about 150 new members have joined during and after the Congress. I hope that over the next year we can encourage our coworkers interested in Mathematical Physics and students to join.

The Leipzig Congress was a success because of the hard work by the local organizing committee chaired by Armin Uhlmann and Bodo Geyer and the scientific committee chaired by Walter Thirring.

I am happy to announce that Aubrey Truman has been officially approved as a member of the Executive Committee and as Secretary. While Detlev Buchholz had been elected to this post, he was unable to take up the duties of Secretary because of his difficult secretarial situation.

At the Leipzig Congress, we discussed the Schrödinger Institute and the Independent Moscow University. In both cases, the organizers have requested statements of support from the IAMP. This has now been approved by the Executive Committee.

Separately, in this bulletin, is information about the Austin electronic preprint registry for Mathematical Physics. I hope that this will be a useful service, and that the IAMP will encourage this and other forms of electronic communication. It would be very useful to give Gerard Emch, who keeps address records, your e-mail and FAX addresses.

It is already time to plan the next Congress. We have received a proposal from Singapore and Paris, and it is likely that another proposal will also come from Granada. The Executive Committee will soon begin to evaluate these proposals for the 1994 Congress. I hope that members will write to me if they have opinions about the site. I will forward all comments to the Executive Committee.

Mail to me concerning IAMP should be addressed c/o the Harvard Physics Department, Lyman Laboratory, Cambridge, MA 02138, U.S.A. *E-mail can be sent to me at* iamp@math.harvard.edu *or* iamp@huma1.bitnet. *I am eager to hear your ideas on how (within our limited budget) the IAMP can help our community.*

Arthur Jaffe

Fachverband "Theoretische und mathematische Grundlagen der Physik"
der Deutschen Physikalischen Gesellschaft (DPG)

Leipzig, den 06.08.1991

Sehr geehrte Frau Kollegin,
sehr geehrter Herr Kollege!

Die Deutsche Physikalische Gesellschaft (DPG) hat im Zuge der Vereinigung den Fachverband (FV) "Theoretische Physik" der ehemaligen Physikalischen Gesellschaft der DDR als FV "Theoretische und mathematische Grundlagen der Physik" (Kurzbezeichnung: Mathematische Physik) übernommen. Die Zielstellung dieses FV war es, all jene Physiker zusammenzuführen, die sich der theoretischen Grundlagenforschung einschließlich der Entwicklung ihrer mathematischen Methoden und der disziplinären Entwicklung der Physik verpflichtet fühlen. Diese allgemeine und fachübergreifende Zielstellung des Verbands soll auch künftig beibehalten werden.

Der FV bemüht sich jetzt um eine solide Basis in den alten Bundesländern. Die unterzeichnenden Teilnehmer des 10. Internationalen Kongresses für Mathematische Physik in Leipzig appellieren daher an Sie, den neuen FV nach Kräften zu unterstützen. Sie bitten alle Kolleginnen und Kollegen, die sich angesprochen fühlen, dem Verband beizutreten.

Die erste Frühjahrstagung des FV findet - zusammen mit den FV "Teilchenphysik" und dem FV "Gravitation und Relativitätstheorie" - während der Jahrestagung der DPG vom 30.03.-03.04.1992 in Berlin statt. Es werden eingeladene Vorträge zu den Themenkreisen
- Dynamische Systeme (bis Quantenchaos)
- Integrable Systeme
- QFT mit klass. Hintergrund bzw. mit Randbedingungen

angeboten.

R. Seiler — K. Sibold — H. Reeh

D. Buchholz — K. Fredenhagen — J.E. Roberts

A. Uhlmann — B. Geyer — P. Stichel

SISSA ISAS

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POST-DOCTORAL POSITIONS - SISSA/ISAS, TRIESTE

The International School for Advanced Studies (SISSA/ISAS) in Trieste expects to offer a number of post-doctoral positions in the following fields:

- Nonlinear analysis
- Geometry
- Mathematical Physics
- Theoretical Particle Physics
- Theory of Condensed Matter
- Theoretical Astrophysics and Cosmology
- Neurophysiology or Molecular Neurobiology

These positions will be available from the Fall of 1992 for one year and renewable for a second year. Candidates should submit their applications by 31 January 1992 with their Curriculum Vitae, list of published works and their research programme. They should arrange for 3 letters of reference to be sent by the same date.

Applications and correspondence should be sent to:

Postdoc programme
International School for Advanced Studies
Via Beirut 2-4
34014 TRIESTE
Italy

POSITION IN THEORETICAL PHYSICS

MARSEILLES

The University of Provence will hopefully offer a position of Professor of Physics, starting October 1st., 1992.

Applicants should be confirmed specialists in Mathematical Physics. Special fields of interest include :

- Classical and quantum dynamical systems
- Non-commutative geometry and applications
- Statistical physics
- Stochastic processes
- Neural networks
- Solid state physics

The position could be permanent and salary determined on the usual French University pay scale. Applicants must speak French.

For further information, please contact :

Bruno IOCHUM
Centre de Physique Théorique
CNRS - Luminy - Case 907
F-13288 MARSEILLE CEDEX 9 (France)

Telephone : 33 91 26 95 22, Telefax : 33 91 26 95 53
Electronic address : IOCHUM@CPTVAX.IN2P3.FR

Marseilles, September 19, 1991

XIX International Colloquium on "Group Theoretical Methods in Physics" Salamanca (SPAIN), June 29–July 4, 1992.

FIRST ANNOUNCEMENT / CALL FOR PAPERS

I. GENERAL INFORMATION

The XIXth International Colloquium on Group Theoretical Methods in Physics (XIX ICGTMP) will be held in Salamanca (Spain) from Monday, June 29 to Saturday, July 4, 1992.

The members of the Organizing Committee are: V. Aldaya (C.S.I.C. and Univ. of Granada), J.A de Azcárraga (Valencia, Vice-Chairman), L.J. Boya (Zaragoza, Chairman), J.F. Cariñena (Zaragoza), L.A. Ibort (Madrid (Complutense)), M. Lorente (Oviedo), J. Mateos (Salamanca), M.A. del Olmo (Valladolid), M.A. Rodríguez (Madrid (Complutense)), and M. Santander (Valladolid).

II. ABOUT SALAMANCA

Salamanca (population: 170.000) is placed 200 Km north–west from Madrid. Nowadays the town life centers around the University, (established 1217 a.D.) which is one of the oldest Universities in Europe. Salamanca is a city with an ancient history: it was originally a fortified Roman camp, and there are a few remains from the visigothic period. During the Middle Ages it became one of the relevant cultural cities in Europe. Salamanca has preserved its old history and the athmosphere and tone given to its old buildings by the masters of the Plateresque and Baroque. Some places like the Plaza Mayor, the façade of the Old University, etc. have gained a well deserved fame, and makes any stay in Salamanca an exciting experience.

III. SCIENTIFIC PROGRAM

The aim of this Colloquium is to provide a meeting point for scientists working on every aspect of Group Theory and its application in Physics.

The members of the Advisory Commitee are: L. Alvarez–Gaumé (CERN), L. Boyle (Kent), L. Faddeev (Saint Petersburg), A. Galindo (Madrid), P. L. García (Salamanca), P. Goddard (Cambridge), F. Iachello (Yale), C. Isham (Imperial College), R. Jackiw (M.I.T), J. R. Klauder (Gainesville), B. Kostant (M.I.T), D. Mermin (Cornell), Y. Ne'eman (Tel Aviv), S. Weinberg (Austin) and B. Zumino (Berkeley).

The main topics which will be covered in this Colloquium are:

1. Symmetry and Foundations in Classical and Quantum Mechanics.
2. Integrable systems, Quantum Groups and Non–Commutative Geometry
3. Super–Physics and Super–Mathematics.
4. Geometry, Topology and Quantum Field Theory
5. Atomic and Molecular Physics, Condensed Matter Physics.
6. Nuclear and Particle Physics.
7. Other Mathematical results and Applications in Group Theory.

The Conference will include plenary, parallel and poster sessions. At this time the plenary speakers are: L. Alvarez Gaumé (CERN), A. Arima (Tokyo), A.P. Balachandran (Syracuse), L. Faddeev (Saint Petersburg), B.R. Judd (Baltimore) (to be confirmed) D. Mermin (Cornell), S. Weinberg (Austin) (to be confirmed) and B. Zumino (Berkeley).

IV. REGISTRATION AND CALL FOR PAPERS

Registration fees for the colloquium will be 17.500 Pts. (about $160 US). Accepted applicants will have either to send a check payable to "XIX ICGTMP" or credit this amount before May, 1st. to the account of the XIX ICGTMP:
account number 01–14745–2,
Banco Bilbao–Vizcaya, Agencia 2305,
Calle Toro 67
37002 SALAMANCA.
(SPAIN)

Late registration fee will be 20.000 Pts. (approx. $190 US).
For further information, please use the e-mail address: ICGTMP@CC.UNIZAR.ES or contact:

Dr. J. Mateos
(Secretaría del XIX ICGTMP)
Facultad de Ciencias
Plaza de la Merced, s/n
37008 SALAMANCA
(SPAIN)

Fax: 34–23–294514
Phone: 34–23–294551
Telex: 26828

Further information will be included in the poster announcing the conference.

If you plan to register, please use the attached sheet

XIX International Colloquium on "Group Theoretical Methods in Physics"
Salamanca (SPAIN), June 29–July 4, 1992.

PRE-REGISTRATION FORM

I plan to attend the XIX International Colloquium on "Group Theoretical Methods in Physics" in Salamanca, Spain, June 29 – July 4, 1992.

Name: . . . . . .
Address: . . . . . .
. . . . . .
e–mail: . . . . . Fax: . . . . . .
Telex: . . . . . .

I would like to present a paper, provisionally entitled: . . . . . .
. . . . . .
. . . . . .
Session where you would include your paper: . . . . . .

(definitive title and abstract should be submitted after the second circular).

Please send this form to:
Dr. J. Mateos
(Secretaría del XIX ICGTMP)
Facultad de Ciencias
Plaza de la Merced, s/n
37008 SALAMANCA
(SPAIN)

PRELIMINARY ANNOUNCEMENT

GEORGIA TECH-UAB INTERNATIONAL CONFERENCE ON DIFFERENTIAL EQUATIONS AND MATHEMATICAL PHYSICS

22-28 MARCH, 1992
GEORGIA INSTITUTE OF TECHNOLOGY

Principal Speakers:

E.B. Davies (London)
C. Foias (Indiana)
N.H. Ibragimov (Moscow)
P.L. Lions (Paris)
H. Matano (Tokyo)
J. Rauch (Michigan)
B. Simon (Cal Tech)
M. Wheeler (Rice)
L.C. Evans (Berkeley)
F. Gesztesy (Missouri)
E.H. Lieb (Princeton)
J. Mallet-Paret (Brown)
L.E. Payne (Cornell)
J. Serrin (Minnesota)
W. Walter (Karlsruhe)

In addition to the plenary lectures in the mornings there will be afternoon sessions of contributed talks. The conference will run from Sunday afternoon until Saturday, with a break on Wednesday afternoon for a cookout at Stone Mountain Park. A second announcement with a tentative list of participants will be mailed in the late Fall. Anyone interested in attending or contributing a talk should contact the organizers at the address below.

This conference is the successor to the series of conferences that have been held in past years in Birmingham, Alabama, and will concentrate on mathematical physics, spectral theory, and nonlinear differential equations. At the end of the week there will be a special session in honor of Bill Ames, who will be retiring from Georgia Tech. The organizing committee consists of Bill Ames (GIT), Christer Bennewitz (UAB), Evans Harrell (GIT), Jim Herod (GIT), and Yoshimi Saito (UAB)

Organizers
GIT-UAB International Conference on
Differential Equations and Mathematical Physics
School of Mathematics
Georgia Institute of Technology
Atlanta GA 30342-0160
telephone 404 894 2700
e-mail: gituab@math.gatech.edu

First announcement

THE 8TH WORKSHOP ON NONLINEAR EVOLUTION EQUATIONS AND DYNAMICAL SYSTEMS (NEEDS'92)
Dubna near Moscow, Russia, 6-17 July 1992

The 8th Workshop on Nonlinear Evolution Equations and Dynamical Systems (NEEDS) will take place in Dubna near Moscow, Russia, from Monday, July 6(arrival day) to Friday, July 17(departure day),1992. The first Workshops of this series have been reported in Physica *2D*, 545-548(1981), *11D*,389-391(1984), *29D*,431-436(1988),Inverse Problems *3*,775-780(1987), *5*,667-670(1989), 7,167-173(1991). Proceedings of the 1987,1989 and 1990 Workshops have also been published:*Nonlinear Evolutions*, ed.J.P.Leon(World Scientific); *Nonlinear Evolution Equations and Dynamical Systems*, eds.S.Carillo and O.Ragnisco(Springer Verlag), and *Nonlinear Evolution Equations and Dynamical Systems (NEEDS'90)*, eds.V.G.Makhankov and O.K.Pashaev(Springer Verlag).

The 8th Workshop will follow the same pattern, both in terms of scientific content and organizational structure. Hence it will be interdisciplinary in character, the topics covered will include integrable dynamical systems (nonlinear ODEs and PDEs), near integrable and nonintegrable model equations, applications in classical and quantal physics(elementary particles, solids, statistical mechanics, fluids, plasmas,etc.) and elsewhere(oceanology, biophysics,etc.). The techniques discussed will range from pure mathematics through computations to applicable theory and experiments.

This is the second time that a NEEDS Workshop will be held in Russia, away from the shore of the Mediterranean Sea where the previous sessions have met. We hope the continuation of this experiment will be successful as well.

An all inclusive fee of US $450 will cover the cost of registration (US $100), meals and lodging during the Workshop (in double occupancy rooms with private facilities) and the transport from Moscow to Dubna and back (which will be provided by the Organizing Committee for participants arriving on July 6 and leaving on July 17). The all inclusive rate for accompanying persons is US $250. A special programme for accompanying persons will include coach trips to Moscow and Sergiev Posad (former Zagorsk) Monastery, a pleasure boat trip up the Volga river and other social events.

For a limited number of young scientists(under 33) who are the first to apply for the Workshop the registration fee will be waved.

The Workshop is open to qualified scientists who have contributed to the topics mentioned above. Persons interested in participating should apply as soon as possible (acceptances will be on a first-come first-serve basis, and will be limited to 80 participants), and in any case before March 31, by contacting V.G.Makhankov, LCTA, JINR, 141980 Dubna Moscow region, Russia and Elena Pankova (Workshop Secretary), International Department, JINR, 141980 Dubna Moscow region, Russia, telex:911621 dubna su, E-mail: pankova@ypr.jinr.dubna.su, telephone:(8 221) 62837 with a copy to Mario Bruschi, Universita di Roma "La Sapienza", P.Aldo Moro, 00185 Roma, Italy, telex: 613255 INFNRO, E-mail: Bruschi@romal.infn.it in Internet, 39942::Bruschi in Decnet, fax: (39-6)4957697.

Messages sent by E-mail, if not confirmed within few days, should be sent again using telex or ordinary mail.

Participants will be notified about their admittance by April 30 at the latest (by telex or E-mail if the appropriate information is specified in the application). They will then be provided with further information, and asked to confirm their participation by depositing a non-refundable advance of US $100. The balance of the participation fee will have to be paid in US$ upon arrival.

F.Calogero

V.Makhankov

To All IAMP Members: -

Special Offer for Communications in Mathematical Physics (Springer-Verlag)

I am sure that long-standing members of IAMP are aware of the special offer available to them to buy Communications in Mathematical Physics at a preferential rate, however, new members may not know the details of this concession.

For the latter case I include a few facts which should be mentioned: The price for 1992 will be DM 496, -, plus carriage charges of DM 64, 20 within FRG and DM 103, 20 (surface mail) to other countries, from 1993 on it will be DM 544, - plus carriage charges (these are not yet fixed). Orders have to be placed with IAMP (through the President), delivery will be together with the regular subscribers directly to addresses provided by IAMP. Note that IAMP - subscriptions are for individuals only. Subscribers must attest that their subscriptions do not replace library subscriptions and that they will not sell these to other parties.

Aubrey Truman
Secretary of IAMP

Topics in Soliton Theory

by R. Carroll

North-Holland Mathematics Studies Volume 167

1991 xii + 428 pages
Price: US $ 100.00 / Dfl. 195.00
ISBN 0-444-88869-1

When soliton theory, based on water waves, plasmas, fiber optics etc., was developing in the 1960-1970 era it seemed that perhaps KdV (and a few other equations) were really rather special in the set of all interesting partial differential equations. As it turns out, although integrable systems are still special, the mathematical interaction of integrable systems theory with virtually all branches of mathematics (and with many currently developing areas of theoretical physics) illustrates the importance of this area. This book concentrates on developing the theme of the tau function. KdV and KP equations are treated extensively, with material on NLS and AKNS systems, and in following the tau function theme one is led to conformal field theory, strings, and other topics in physics. The extensive list of references contains about 1000 entries.

Contents: KdV and KP; Analytic Methods. Inverse Scattering. KdV on the Line. Problems in Mechanics and Hill's Equation. On the Geometry of KdV. Finite Zone Potentials. Hamiltonian Theory for KdV. Determinant Methods for KdV and KP; Tau Functions. Systems and Algebraic Methods. Orbits of the Vacuum. AKNS Systems. Some Lie Theoretic Methods. The Hirota Bilinear Identity. Algebraic Curves and KP. Introductory Sato Theory. Physics. Holonomic Quantum Fields. Ising Model and Bose Gas. Some remarks on 2-D Quantum Gravity and KdV. Conformal Field Theory. More on Conformal Field Theory and Tau Functions. More on Kricever Data, Grassmannians, Curves etc. Remarks on Strings. More on Strings, Riemann Surfaces, and Tau Functions. Remarks on Tau Functions, Cauchy-Riemann Operators, and Determinant Bundles. Quantum Inverse Scattering. Appendices: Differential Geometry and Elementary Hamiltonian Theory. Riemann Surfaces and Algebraic Curves. References. Index.

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DIFFERENTIAL GEOMETRY AND ITS APPLICATIONS

Editor-in-Chief: D. Krupka, *Masaryk University, Department of Mathematics, Janackovo nam 2a, 66295 Brno, Czechoslovakia, and Silesian University Opava, Czechoslovakia*

AIMS AND SCOPE

This journal publishes original research papers and survey papers in differential geometry and in all interdisciplinary areas in mathematics which use differential geometric methods and investigate geometrical structures.
The following main areas are covered:

- differential equations on manifolds,
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- topology of manifolds,
- mathematical physics.

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NEW AND FORTHCOMING PAPERS

V.N. Chetverikov:
On the structure of integrable *C*-fields
E.M. Isaenko:
Integrability conditions for a certain class of nonlinear evolution equations and Kähler geometry
J.F. Cariñena, M. Crampin *and* **L.A. Ibort:**
On the multisymplectic formalism for first order field theories
M.J. Gotay:
A multisymplectic framework for classical field theory and calculus of variations II: Space + time decomposition
V. Cervera, F. Mascaró *and* **P.W. Michor:**
The action of the diffeomorphism group on the space of immersions
A. Cap *and* **J. Slovák:**
Infinitesimally natural operators are natural
J. Monterde:
A characterization of graded symplectic structures
I. Kolář *and* **M. Modugno:**
Torsions of connections on some natural bundles.
J. Berndt *and* **L. Vanhecke:**
Two natural generalizations of locally symmetric spaces
E. Martínez, J.F. Cariñena *and* **W. Sarlet:**
Derivations of differential forms along the tangent bundle projections
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Maximum 2-rank webs AGW (6,3,2)

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407IJ/COFMARIJ

Dear Colleague: September 15, 1991

As a service to the Mathematical Physics community we have installed an electronic archive for preprints in Mathematical Physics, the goal being to enhance the distribution of preprints (not to replace the current system using regular mail).

The archive is completely free to the user, and can be accessed by sending appropriate email messages to the internet address mp_arc@math.utexas.edu. We emphasize that the system is accessible to anyone who can send an email message to this internet address: one need not have access to telnet or ftp, though from a site with this capability messages may be transmitted slightly quicker, within a few seconds rather than a few miniutes.

Instructions are automatically returned to the sender of an empty message to that address. The system is set up to work automatically, without further intervention on our part; however provision is also made for user comments and suggestions about the system, which we welcome and will consider as time permits.

A separate part of the service is a repository of email addresses. The decision whether to include an address in the system is completely up to the individual, so, as with the preprint repository, the list will start small and grow as people use the archive. We would like to encourage our colleagues to take advantage of either or both of these services and to "deposit" their preprints and email addresses using the instructions of the system.

As an example of the proper syntax needed to generate most of the desired responses from the archive, the following email message would lead to a list of all papers currently on deposit being returned to the sender by email:

REQUEST: send index

Note that the word "request" must be in capital letters, not preceeded even by blank spaces on the line, and must be followed by ":", the others words being in lower case. We emphasize that every message sent to the archive will generate a

return message: if improper syntax is used, the return message either contains general instructions, or specific instructions concerning the error.

In the near future added features will be incorporated in the system, to enable searches by keyword, and to obtain the address list of the membership of the IAMP.

H. Koch, R. de la Llave, C. Radin
Dept. of Mathematics
University of Texas
Austin, TX 78712

Universität Bielefeld
BiBoS
Forschungszentrum
Bielefeld-Bochum-Stochastik

PUBLICATIONS

- Hida T., Kuo H.-H., Obata N.: Transformations for White Functionals, BiBoS preprint Nr. 471

- Albeverio S., Hohler E.G.B., Zegarlinski B.: Ferromagneticity of simplicial fields on two dimensional compact manifolds, BiBoS preprint Nr. 472

- Albeverio, S. Tirozzi B., Zegarlinski B.: Rigorous results for the free energy in the Hopfield model, BiBoS preprint Nr. 473

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-01: L. O'RAIFEARTAIGH, P. RUELLE, & I. TSUTSUI: Quantum equivalence of constrained WZNW and Toda theories. *Appeared in Phys. Lett. B* 258(1991)359-363.

-02: E. BUFFET, & P. HANNIGAN: Directed random walks in random environments.

-03: L. O'RAIFEARTAIGH, P. RUELLE, I. TSUTSUI, & A. WIPF: W-Algebras for generalized Toda theories.

-04: M. MCGETTRICK, W. MCGLINN, N. GORMAN, & L. O'RAIFEARTAIGH: Virasoro operators for arbitrarily twisted Kac-Moody algebras.

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-06: F. BENATTI: The classical limit of a class of quantum dynamical semigroups.

-07: J. BURZLAFF, & P. MC CARTHY: A study of a 90° Vortex-Vortex scattering process.

-08: L. O'RAIFEARTAIGH,N. STRAUMANN, & A. WIPF: On the origin of the Aharonov-Bohm effect. *Appeared in Comments Nucl. Part. Phys.* 20(1991)15-22.

-09: JAMES MCCONNELL: Theory of dielectric relaxation. *Published in the proceedings of the Meeting of the Dielectrics Society on Relaxation, Charge Injection and Charge Transport, Canterbury, 1991*

-10: A.E. PATRICK, & V.A. ZAGREBNOV: A probabilistic approach to parallel dynamics for the Little-Hopfield model.

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-14: * JAMES MCCONNELL: Maynooth revisited.

-15: N.G. DUFFIELD, & R.F. WERNER: Classical Hamiltonian dynamics for quantum Hamiltonian mean field limit.

-16: J.M.G. AMARO DE MATOS, A.E. PATRICK, & V.A. ZAGREBNOV: Random infinite-volume Gibbs states for the Curie-Weiss random field Ising model.

-17: L. FEHÉR, L. O'RAIFEARTAIGH, P. RUELLE, I. TSUTSUI, & A. WIPF: Generalized Toda theories and W-algebras associated with integral gradings.

-18: BRIAN P. DOLAN: Energy spectra in inflationary models. *Published in the Proc. 4th. Canadian Conf. on General Relativity and Relativistic Astrophysics.*

-19: M.A. VANDYCK, & BREANNDÁN Ó NUALLÁIN: On Robinson's expansion of the axially symmetric Robinson-Trautman metrics. *Appeared in Class. Quantum Grav.* 8(1991)769-777.

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ON HOPF ALGEBRA STRICTLY CONNECTED TO THE DIFFERENTIAL STRUCTURE OVER THE N-DIMENSIONAL QUANTUM EUCLIDEAN SPACE

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STARK RESONANCES IN DISORDERED SYSTEMS

H. P. W. Gottlieb, Division of Science and Technology, Griffith University, Nathan, Queensland, 4111, Australia
ON SPECTRAL-SPACING DISTRIBUTIONS FOR SYSTEMS LACKING ASYMPTOTICS

William G. Faris, Program in Applied Mathematics, University of Arizona, Tucson, Arizona 85721
LOCALIZATION FOR A RANDOM DISCRETE WAVE EQUATION

William G. Faris and Woody J. Tsay, Program in Applied Mathematics, University of Arizona, Tucson, Arizona 85721
SCATTERING OF A WAVE PACKET BY AN INTERVAL OF RANDOM MEDIUM

C. Gonera and P. Kosiński, Insitute of Physics, University of Łódź, Pomorska 149/153, PL-90-236 Łódź, Poland
GUAGE SYMMETRY AND LONG-RANGE INTERACTIONS IN THREE- DIMENSIONAL MASSIVE GRAVITY

GAUGE SYMMETRIES IN THREE DIMENSIONS

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THE GLOBAL MINIMUM OF ENERGY IS NOT ALWAYS A SUM OF LOCAL MINIMA - A NOTE ON FRUSTRATION

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Q-INTEGRALS ON THE QUANTUM COMPLEX PLANE

Abhay Ashtekar, Physics Department, Syracuse University, Syracuse, NY 13244-1130 and Theoretical Physics, Imperial College, London SW7 2BZ, U.K. and Joseph Samuel, Physics Department, Syracuse University, Syracuse, NY 13244–1130 and Raman Research Institute, Bangalore 560 080, India
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GRAVITONS AND LOOPS

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A LOOP REPRESENTATION FOR THE QUANTUM MAXWELL FIELD

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POLYNOMIAL CONSTRAINTS FOR GENERAL RELATIVITY USING REAL GEOMETRODYNAMICAL VARIABLES

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GLOBAL UNIQUENESS AT FIXED ENERGY IN MULTIDIMENSIONAL INVERSE SCATTERING THEORY

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A RENORMALIZATION GROUP ANALYSIS OF CORRELATION FUNCTIONS FOR THE DIPOLE GAS

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A NEW $\mathcal{K}$-MATRIX APPROACH TO N-BODY SCATTERING

SOLUTION OF THE CHANDLER-GIBSON EQUATIONS FOR A THREE-BODY TEST PROBLEM

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FINITE-SIZE SCALING AND SURFACE TENSION FROM EFFECTIVE ONE-DIMENSIONAL SYSTEMS

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A FOUR-DIMENSIONAL YANG-MILLS APPROACH TO POLYNOMIAL INVARIANTS OF LINKS

SKEIN RELATIONS FOR ANY REPRESENTATION OF ANY LIE GROUP

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SPECTRAL AND FRACTAL GEOMETRY: FROM THE WEYL-BERRY CONJECTURE FOR THE VIBRATIONS OF FRACTAL DRUMS TO THE RIEMANN ZETA-FUNCTION

Michel L. Lapidus, Department of Mathematics, University of California, Riverside, California 92521-0135, and Helmut Maier, Department of Mathematics, Boyd Graduate Studies Research Center, The University of Georgia, Athens 30602
THE RIEMANN HYPOTHESIS, VIBRATING FRACTAL STRINGS AND THE MODIFIED WEYL-BERRY CONJECTURE

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A NOTE ON DIVERGENCE-FREE VECTOR WAVELETS

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Paul Federbush, Department of Mathematics, University of Michigan, Ann Arbor, MI 48109
LOCAL STRONG SOLUTION OF THE NAVIER-STOKES EQUATIONS IN TERMS OF LOCAL ESTIMATES

A NOTE OF POSSIBLE RELEVANCE TO THE THEORY OF TURBULENCE

NAVIER AND STOKES MEET THE WAVELET

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AN INTRODUCTION TO CALCULUS FOR ASSOCIATIVE RINGS

CALCULUS OF VARIATIONS FOR MULTIVATED FUNCTIONALS

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ALGEBRAIC SPINORS FOR $R^{9,1}$

M. V. Saveliev, Institute for High Energy Physics, Protvino 142284, Moscow region, USSR
ON SPECIALIZING THE BROCKETT EQUATION FOR NONABELIAN VERSIONS OF THE GENERALIZED TODA LATTICES

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SOLUTION OF THE CAUCHY PROBLEM FOR A CONTINUOUS LIMIT OF THE TODA LATTICE AND ITS SUPEREXTENSION

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MAXIMAL ABELIAN SUBALGEBRAS OF PSEUDO-ORTHOGONAL LIE ALGEBRAS

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SIMILARITY SOLUTIONS OF EQUATIONS OF NONLINEAR OPTICS

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P. Winternitz, A. M. Grundland and J. A. Tuszyński, Université De Montréal, CP 6128-A, Montréal (QC) H3C 3J7
NONLINEAR MAGNETIZATION PROCESSES IN THE LANDAU-GINZBURG MODEL OF MAGNETIC INHOMOGENEITIES FOR UNIAXIAL FERROMAGNETS

Palle E. T. Jorgensen, Division of Mathematical Sciences, The University of Iowa, Iowa City, Iowa 52242
INTERTWINING OPERATORS, DERIVATIONS OF THE CAR-ALGEBRA, AND REPRESENTATIONS OF $U(p,q)$

Palle E. T. Jorgensen, University of Iowa, Iowa City, IA 52242 and Robert T. Powers, University of Pennsylvania, Philadelphia, PA 19104
POSITIVE ELEMENTS IN THE ALGEBRA OF THE QUANTUM MOMENT PROBLEM

Palle E. T. Jorgensen, University of Iowa, Iowa City, IA 52242 and Geoffrey L. Price, U.S. Naval Academy, Annapolis, MD 21402
INDEX THEORY AND SECOND QUANTIZATION OF BOUNDARY VALUE PROBLEMS

Rodolfo Gambini, Instituto de Fisica, Facultad de Ciencias, Tristan Narvaja 1674, Montevideo, Uruguay and Bernd Brügmann and Jorge Pullin, Physics Department, Syracuse University, Syracuse, NY 13244-1130
KNOT INVARIANTS AS NONDEGENERATE STATES OF FOUR DIMENSIONAL QUANTUM GRAVITY

Abhay Ashtekar, Physics Department, Syracuse University, Syracuse, NY 13244-1130 and C. J. Isham, Blackett Laboratory, Imperial College, South Keensington, London SW7 2BZ, UK
INEQUIVALENT OBSERVABLE ALGEBRAS: ANOTHER AMBIGUITY IN FIELD QUAANTISATION

John R. Klauder, Departments of Physics and Mathematics, University of Florida, Gainesville, Florida 32611 and Enrico Onofri, Dipartimento di Fisica, Università di Parma and INFN, Gruppo Collegato di Parma, 43100 Parma, Italy
THE QUANTUM HALL EFFECT AND COORDINATE-FREE QUANTIZATION

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Lavelle M.[1] and McMullan D.[2],[1]Institut für Theoretische Physik, Universität Regensburg, Universitätsstrasse 31, W-8400 Regensburg, Germany, [2]Dublin Institute for Advanced Studies, 10 Burlington Road, Dublin 4, Ireland.
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Leon J., Département de Physique Mathématique, Université Montpellier II, 34095 Montpellier Cedex 05, France. Physics Letters A, Vol.156, No.6, 24 June 1991.
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Ronveaux A. and Belmehdi S., Laboratoire de Physique Mathématique, Facultés Universitaires N.D. de la Paix, Rue de Bruxelles, 61, 5000 Namur, Belgium. In print: Journal of Physics A.
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