RUNDBRIEF

der

GESELLSCHAFT FÜR ANGEWANDTE MATHEMATIK UND MECHANIK

Herausgegeben vom

Sekretär der GAMM
V. Ulbricht, Dresden

Redaktion

V. Hardt, Eichstätt
C. Renner, Regensburg

2000 — Brief 1

Editorial

In Kürze werden wir uns zur Jahrestagung 2000 in Göttingen treffen. Unsere Gastgeber arbeiten zur Zeit sehr intensiv an der Gestaltung des endgültigen Programmes. Immerhin sind über 800 Vorträge in den wissenschaftlichen Sektionen und Minisymposien einzuordnen. Ich möchte an dieser Stelle nochmals auf die Jahreshauptversammlung unserer Gesellschaft hinweisen und zu einer Teilnahme einladen. Für den in der Tagesordnung enthaltenen Punkt Vorstandsratswahlen bitte ich, wie im Wahlaufruf des Präsidenten - veröffentlicht im Rundbrief 1999/2 - ausgewiesen wurde, um die Zusendung von **Kandidatenvorschlägen** bis spätestens zum **8. März 2000**.

Bedingt durch den Termin im Februar der Jahrestagung 2001 in Zürich, sind bereits erste Aktivitäten zur inhaltlichen und organisatorischen Vorbereitung angelaufen. In diesem Zusammenhang bitte ich, die auf der Folgeseite dargelegten Hinweise zur **Beantragung einer finanziellen Unterstützung** zu beachten.

An der Otto-von-Guericke-Universität Magdeburg, Institut für Mechanik, wurde ein Informationsdienst für das Gebiet der Technischen Mechanik eingerichtet. Verbreitet werden an alle Interessierten aus Hochschulen, Instituten und Industrie kostenfrei Informationen zu wissenschaftlichen Treffen, Vorträgen und Konferenzen, Stellenausschreibungen und -gesuche, Anzeigen zu Publikationen, Reporte und Arbeitsmaterialien. Diesbezügliche Informationen sind - unter Verzicht auf attachments - an:

tminfo@masch-bau.uni-magdeburg.de

z.H. Prof. A. Bertram zu senden. Für eine Aufnahme in die Verteilerliste ist als subject: "TMinfo-Teilnahme" anzugeben.

Abschließend möchte ich nochmals auf die neuen Konten des Schatzmeisters verweisen:

Deutsche Bank 24 Wuppertal	Postbank, Niederlassung Essen
BLZ 330 700 24	BLZ 360 100 43
Konto–Nr.: 2220911	Konto–Nr.: 611020430
Prof. Dr. A. Frommer, Sonderkonto GAMM	Prof. Dr. A. Frommer, Sonderkonto GAMM

Weitere Informationen zu den Mitgliedsbeiträgen sind am Ende des Rundbriefes enthalten.

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Volker Ulbricht
Sekretär der GAMM

Homepage der GAMM: `http://www-GAMM.uni-regensburg.de`

GAMM 2001

GAMM Annual Meeting, February 12 – 15, 2001

in Zürich at ETH

We do expect to receive funds from the Swiss National Science Foundation (SNSF) to financially support participants from Central and Eastern European Countries and New Independent States (CEEC/NIS). The following beneficiary countries are eligible for participation: Albania, Bulgaria, the Czech Republic, Hungary, Kirghizstan, Macedonia, Poland, Romania, Russia, Slovakia, Slovenia and the Ukraine.

Please note that for such an application for support we need the following information by July 1st, 2000.

1. Curriculum Vitae containing age, name, full address of home institution, scientific background, description of scientific career.
2. Description of contribution to the conference. Here, at least the abstract of the contributed paper should be supplied.
3. An estimate for the needed support.

Note that the format of the abstract will be given on our web-page

`http://www.GAMM2001.ethz.ch/`

which we hope to have operational by March 2000.

The organizers of the GAMM 2001

Address: GAMM 2001 Conference Office
Seminar for Applied Mathematics
ETH-Zentrum HG G57.1
CH-8092 Zürich
Switzerland

E-mail: GAMM@math.ethz.ch
(operatinal starting February 1st 2000)

Inhaltsverzeichnis

Agreement

between

Sociedad Española de Matemática Aplicada (SEMA)

and

Gesellschaft für Angewandte Mathematik und Mechanik e.V. (GAMM)

on Reciprocal Membership

The Sociedad Española de Matemática Aplicada (SEMA) and the Gesellschaft für Angewandte Mathematik und Mechanik e.V. (GAMM) agree to enter into a reciprocal membership agreement.

Under this agreement:

1. Any member in good standing of SEMA who wishes to join the GAMM will be accepted as a GAMM Affiliated (Reciprocity) Member upon receipt of the GAMM application form and dues payment.

   Any member in good standing of GAMM who wishes to join the SEMA will be accepted as a SEMA Affiliated (Reciprocity) Member upon receipt of the SEMA application form and dues payment.

2. The special dues rate for SEMA members joining GAMM under the reciprocal agreement will be two thirds of the current rate. Dues are accepted in Deutsch Marks or by cheque in Deutsch Marks drawn on a German Bank or by major credit card payments.

   The special dues rate for GAMM members joining SEMA under the reciprocal agreement will be two thirds of the current rate. Dues are accepted in Spanish Pesetas or by cheque in Spanish Pesetas.

3. Affiliated members receive all regular member services and benefits, except that they are ineligible to vote in SEMA or GAMM elections.

4. SEMA and GAMM will distribute the reciprocal organization's membership material in order to facilitate the program.

5. This agreement is in effect until terminated by one of the two societies.

Professor Dr. Götz Alefeld
President of GAMM

Karlsruhe, December 4, 1999

Professor Enrique Fernandez-Cara
President of SEMA

Sevilla, December 4, 1999

Agreement

between

Association Française de Mécanique (AFM)

and

Gesellschaft für Angewandte Mathematik und Mechanik e.V. (GAMM)

on Reciprocal Membership

The Association Française de Mécanique (AFM) and the Gesellschaft für Angewandte Mathematik und Mechanik e.V. (GAMM) agree to enter into a reciprocal membership agreement.

Under this agreement:

1. Any member in good standing of AFM who wishes to join the GAMM will be accepted as a GAMM Affiliated Member upon receipt of the GAMM application form and dues payment.

   Any member in good standing of GAMM who wishes to join the AFM will be accepted as a AFM Affiliated Member upon receipt of the AFM application form and dues payment.

2. The special dues rate for AFM members joining GAMM under the reciprocal agreement will be two thirds of the current rate. Dues are accepted in Deutsch Marks or by cheque in Deutsch Marks drawn on a German Bank or by major credit card payments.

   The special dues rate for GAMM members joining AFM under the reciprocal agreement will be two thirds of the current rate. Dues are accepted in French Franc or by cheque in French Franc or by major credit card payments.

3. Affiliated members receive all regular member services and benefits, except that they are ineligible to vote in AFM or GAMM elections.

4. AFM and GAMM will distribute the reciprocal organization's membership material in order to facilitate the program.

5. This agreement is in effect until terminated by one of the two societies.

Professor Dr. Götz Alefeld
President of GAMM

Karlsruhe, March 21, 1999

Professor Dr. Jean-Claude Lachat
President of AFM

Paris, March 21, 1999

Berichte der GAMM Fachausschüsse

FA: Diskretisierende Methoden in der Festkörpermechanik

Jahresbericht 1999 (Zeitraum 01.01.1999 – 31.12.1999)

Dem Ausschuss gehören derzeit an: (Stand 31.12.1999)

H. Antes (Braunschweig)
D. Braess (Bochum)
F.D. Fischer (Leoben)
W. Hackbusch (Kiel)
G. Hofstetter (Innsbruck)
G. Kuhn (Erlangen)
T. Küpper (Köln)
U. Langer (Vorsitz) (Linz)
H. Mang (Wien)
A. Meyer (Chemnitz)
F.G. Rammerstorfer (Wien)
E. Rank (München)
R. Rannacher(Heidelberg)
Ch. Schwab (Zürich)
E. Stein (Hannover)
R. Verfürth (Bochum)
W. Wendland (Stuttgart)
P. Wriggers (Darmstadt)
W. Wunderlich (München)

Als Gäste wirken mit: H. Bufler (Stuttgart), H.D. Mittelmann (Arizone/USA), G. Rieder (Aachen) und G. Wittum (Stuttgart).

Im Berichtzeitraum hat eine außerordentliche Sitzung des GAMM-Fachausschusses stattgefunden. Diese außerordentliche Sitzung wurde am Rande der MAFELAP 1999 in London durchgeführt. Hauptdiskussionspunkte dieser Sitzung waren die Schwerpunkte und Tendenzen in der Forschung zur Numerischen Festkörpermechanik. Aus dieser Diskussion entstanden eine Reihe von Vorschlägen für das wissenschaftliche Programm der GAMM-Jahrestagungen und vor allem für Minisymposia auf internationalen Tagungen sowie Workshops (siehe nachfolgende Aufstellung).

Aktuelle Informationen zum Fachausschuss können über das Internet

`http://www.numa.uni-linz.ac.at/Gamm/gamm-committee.html`

abgerufen werden.

Im Berichtszeitraum sind auf Anregungen aus dem Ausschuss die folgenden GAMM-Seminare/Workshops durchgeführt worden:

- 15th GAMM-Seminar Kiel on "Numerical Techniques for Composite Materials", 22.01. – 24.01.1999 in Kiel (Deutschland),
  Veranstalter: W. Hackbusch, St. Sauter,
  WWW–Info: `http://www.numerik.uni-kiel.de/gamm.html`.
- Oberwolfach Seminar on "Mathematical Analysis of FEM for Problems in Mechanics", 07.02. – 13.02.1999 in Oberwolfach (Deutschland),
  Veranstalter: D. Braess, E. Ramm, Ch. Schwab.

- Minisymposium „Wavelet Diskretisierung von Operatorengleichungen“ auf der GAMM-Jahrestagung 1999, 12.04. – 16.04.1999, Metz,
  Veranstalter: Ch. Schwab, R. Schneider (Chemnitz).
- Minisymposium “Adaptivity and Applications of Domain Decomposition Methods”, MAFELAP 1999, 22.06. – 25.06.1999 an der Brunel University, Uxbridge (UK),
  Veranstalter: F.K. Hebeker, R. Hoppe, U. Langer.
- Minisymposium “Multifield Problems”, MAFELAP 1999, 22.06. – 25.06.1999 an der Brunel University, Uxbridge (UK),
  Veranstalter: W. Wendland.
- Minisymposium “Hirarchical modelling”, MAFELAP 1999, 22.06. – 25.06.1999 an der Brunel University, Uxbridge (UK),
  Veranstalter: E. Rank, B. Szabo.
- Minisymposium “Two–Phase Flows and Sedimentation”, ICIAM 99, 05.07. – 09.07.1999 in Edinburgh (UK),
  Veranstalter: W. Wendland.
- Minisymposium “Application of FEM-BEM couplings in continuum mechanics”, ENUMATH-99, 26.07. – 30.07.1999 in Jyväskylä (Finnland),
  Veranstalter: U. Langer, W. Wendland.
- Minisymposium “Adaptivity and Error Control”, ENUMATH-99, 26.07. – 30.07.1999 in Jyväskylä (Finnland),
  Veranstalter: R. Hoppe, R. Rannacher.
- Minisymposium “Computational Mechanics of Tunneling”, Fifth U.S. National Congress on Computational Mechanics, 04.08. – 06.08.1999 in Boulder, Colorado,
  Veranstalter: G. Beer, G. Hofstetter,
  WWW-Info: `http://civil.colorado.edu/usnccm99`.
- Special Session on “Integration of CAD and Finite Element Analysis”, ECCM 1999, 31.08. – 04.09.1999 an der Technischen Universität München,
  Veranstalter: E. Rank.
- Internationale Tagung “Multifield Problems”, SFB 404, 06.10. – 08.10.1999 an der Universität Stuttgart (Deutschland),
  Veranstalter: W. Wendland, W. Schiehlen, A.-M. Sändig.
- GAMM/AMIF-Workshop über “Mathematical Problems in Suspension Flows”, 09.10. – 10.10.1999 an der Universität Stuttgart (Deutschland),
  Veranstalter: W. Wendland, R. Bürger.

Geplante GAMM-Seminare/Workshops/Tagungen:

- GAMM/GACM-Seminar: „Bruch- und Schädigungsmechanik – Modelle und numerische Simulation“, 09.03. – 10.03.2000, Universität Erlangen-Nürnberg,
  Veranstalter: D. Gross (Darmstadt) und G. Kuhn (Erlangen),
  WWW-Info: `http://ltm.uni-erlangen.de/GAMM/GAMM.html`.
- Minisymposium über „Parallele Algorithmen und Gebietsdekompositionsverfahren“ auf der GAMM–Jahrestagung 2000 in Göttingen (Deutschland), 03.04. – 07.04.2000,

Veranstalter: R.H.W. Hoppe, U. Langer,
WWW-Info: `http://gamm2000.dlr.de`.

- Minisymposium über „Geomechanik der Tunnelvortriebe“ auf der GAMM–Jahrestagung 2000 in Göttingen (Deutschland), 03.04. – 07.04.2000,
  Veranstalter: H.A. Mang,
  WWW-Info: `http://gamm2000.dlr.de`.
- Minisymposium “p-Fem for Mechanics and Structural Engineering”, p-FEM2000, 31.05. – 02.06.2000, St. Louis (USA),
  Veranstalter: E. Rank.
- Minisymposium “Recent advances in the mathematical analysis of hp-FEM”, p-FEM2000, 31.05. – 02.06.2000, St. Louis (USA),
  Veranstalter: Ch. Schwab.
- Organized Session “High order methods for shell and spatial structures”, IASS-IACM2000, 04.06. – 07.06.2000, Chania, Kreta (Griechenland),
  Veranstalter: E. Rank.
- International Workshop on “Inverse Problems”, 25.06. – 01.07.2000 in St. Wolfgang (Österreich),
  Veranstalter: SFB F013 (Sprecher: U. Langer),
  WWW-Info: `http://www.sfb013.uni-linz.ac.at`.
- International Workshop on “Scientific Computing in Electrical Engineering” (SCEE-2000), 20.08. – 23.08.2000 in Warnemünde (Deutschland),
  Veranstalter: M. Günther, U. Langer, U. van Rienen, E. Jan W. ter Maten, Wil H.A. Schilders, U. Feldmann.
  WWW-Info: `http://www.SCEE-2000.uni-rostock.de`.
- Prenominated Session über “Plates and Shells” auf dem 20th International Congress of Theoretical and Applied Mechanics in Chicago (USA), 27.08. – 03.09.2000,
  Veranstalter: H.A. Mang, A.W. Leissa,
  WWW-Info: `http://www.tam.uiuc.edu/ICTAM2000`.
- 239. WE-Heraeus-Seminar on “Modelling and Algorithms for Problems in Solid Mechanics”, 04.09. – 07.09.2000 in Bad Honnef (Deutschland),
  Veranstalter: H. Blum, D. Braess, P. Wriggers,
  WWW-Info: `http://www.mathematik.uni-dortmund.de/workshops/CompMech2000.html`.
- Invited Session über “Computational Mechanics of Concrete” auf dem European Congress on Computational Methods in Applied Sciences and Engineering in Barcelona (Spanien), 11.09. – 14.09.2000,
  Veranstalter: H.A. Mang, G. Meschke,
  WWW-Info: `http://www.cimne.upc.es/eccomas`.

U. Langer, Linz

FA: Effiziente numerische Verfahren für partielle Differentialgleichungen

Jahresbericht 1999 (Zeitraum 01.01.1999 – 31.12.1999)

Dem Fachausschuss gehören an (Stand 31.12.1999):

K. Böhmer (Marburg)
W. Hackbusch (Leipzig)
T. Küpper (Köln)
U. Langer (Linz)
H.D. Mittelmann (Tempe, USA)
R. Rannacher (Heidelberg)
H.-G. Roos (Dresden)
S. Sauter (Zürich) (Vorsitz)
K. Stüben (St. Augustin)
L. Tobiska (Magdeburg)
U. Trottenberg (Köln)
K. Witsch (Düsseldorf)
H. Yserentant (Tübingen)

Auf der Sitzung des Fachausschusses der GAMM–Jahrestagung in Metz wurde S. Sauter, Zürich, als Nachfolger von W. Hackbusch zum neuen Vorsitzenden des FA gewählt.

Aktivitäten im Berichtszeitraum:

Vom 22.01. – 24.01.1999 fand das 15. Kieler GAMM-Seminar in Kiel zum Thema "Numerical Techniques for Composite Materials" statt (Veranstalter: W. Hackbusch und S. Sauter). WWW-Informationen auf

`http://www.numerik.uni-kiel.de/gamm/`

Ein GAMM–Seminar in Magdeburg (20.09. – 23.09.1999) beschäftigte sich mit dem Thema "Numerical Methods for Transport–Dominated and Related Problems" (Veranstalter: L. Tobiska). WWW-Informationen auf

`http://david.math.uni-magdeburg.de/EPSICODE99/`

Vom 21.01. – 23.01.2000 fand ein Kieler GAMM–Seminar zum Thema "Adaptive Methods – Error Estimators" statt. (Veranstalter: C. Carstensen, W. Hackbusch, A. Kunoth).

Geplante Aktivitäten:

Vom 03.02. – 05.02.2000 setzt das 16. GAMM–Seminar Leipzig die Serie der 15 Kieler GAMM–Seminare fort. Es wird sich mit dem Thema "Numerical Techniques for Schrödinger Equations" beschäftigen (Veranstalter: W. Hackbusch).

Vom 25.09. – 27.09.2000 findet ein Workshop zum Thema "Computational Methods for Multidimensional Reactive Flows" statt (Organisatoren: R. Rannacher, J. Warnatz, M. Braack, R. Becker). WWW-Informationen auf

`http://www.iwr.uni-heidelberg.de/comref2000/`

Allgemeine Bemerkung:

Vom 27.02. – 04.03.2000 wird W. Hackbusch zusammen mit T. v. Petersdorff und S. Sauter eine Oberwolfach–Tagung über "Sparse Approximation of Non–Local Operators" durchführen.

S. Sauter, Zürich

Herr S. Sauter, Zürich, wurde 1999 in Metz zum neuen Vorsitzenden des Fachausschusses gewählt. Er ist zu erreichen unter:

Prof. Dr. Stefan Sauter
Professur für Angewandte Mathematik
Institut für Mathematik
Universität Zürich
Winterthurerstr. 190
CH-8057 Zürich

Tel.: +41-(0)1-635-5845
Fax: +41-(0)1-635-5705
E-mail: stas@amath.unizh.ch

Der Vorstandsrat wünscht Herrn Sauter viel Erfolg in seiner Tätigkeit und möchte gleichzeitig Herrn W. Hackbusch, Kiel, für seine langjährigen verdienstvollen Bemühungen in der Leitung des Fachausschusses danken.

V. Ulbricht, Sekretär

FA: Angewandte Stochastik und Optimierung

Jahresbericht 1999/2000

Dem Fachausschuss gehören derzeit an:

H.G. Bock (Heidelberg)
H.A. Eschenauer (Siegen)
U. Herkenrath (Duisburg)
H.-U. Küenle (Cottbus)
K. Lommatzsch (Berlin)
K. Marti (München) (Vorsitz)
F. Pfeiffer (München)
U. Rieder (Ulm)
T. Vietor (Köln)
K. Schittkowski (Bayreuth)
G.I. Schuëller (Innsbruck)

Über die Tätigkeit des Fachausschusses im Jahre 1999, über laufende oder geplante Projekte ist wie folgt zu berichten:

1. GAMM-Workshop „Stochastische Modellierung und Steuerung“
   Der 3. GAMM-Workshop zu diesem Thema fand vom 22. – 26. März 1999 an der TU Ilmenau statt.
   Organisation: Frau Prof. Dr. S. Vogel, Institut für Mathematik, TU Ilmenau.
   Programmkomitee: H.-J. Girlich (Leipzig), W. Grecksch (Halle), G. Hübner (Hamburg), H.-U. Küenle (Cottbus), K. Marti (München), V. Nollau (Dresden), U. Rieder (Ulm) und S. Vogel (Ilmenau).

   Der 4. GAMM-Workshop in dieser Reihe ist vom 2. – 6. April 2001 an der Martin-Luther-Universität Halle-Wittenberg geplant. Organisation: Prof. Grecksch.

2. Das Sonderheft “Stochastic Optimization” mit einer Auswahl von Beiträgen, die in der Sektion 14 „Stochastische Optimierung“ der Münchener Stochastik-Tage 1998 sowie im parallel dazu stattfindenden DFG-Workshops „Steuerung von Robotern in Echtzeit“ präsentiert wurden, erscheint nun als Doppelheft No. 3/4, Vol. 47, 2000 der Zeitschrift “OPTIMIZATION”.

3. Der 4. GAMM/IFIP-Workshop über "Stochastic Optimization: Numerical Methods and Technical Applications" findet vom 27. – 29. Juni 2000 wieder an der Universität der Bundeswehr München in Neubiberg statt; Organisation: K. Marti.
   Programmkomitee: K. Marti (Chairman), H.A. Eschenauer (Siegen), L. Fahrmeir (München), P. Kall (Zürich), J. Mayer (Zürich), F. Pfeiffer (München), R. Rackwitz (München), G.I. Schuëller (Innsbruck).

4. CISM-Course "Emerging Methods for Treating Multidisciplinary Optimization Problems", Udine, 5. – 9. Juni 2000.
   Referenten: J.J. Blachut (Liverpool, UK), H. Eschenauer (Siegen), P. Hajela (Rensselar Polytechn. Inst.), K. Marti (München), A. Schoofs (Eindhoven), V.V. Toropov (Bradford, UK).

5. Weitere Veranstaltungen, an denen Mitglieder des Fachausschusses als Referenten mitwirkten:
   - Workshop „Softwarewerkzeuge zur Optimierung mechanischer Systeme" am 12. März 1999, DLR Institut für Robotik und Systemdynamik, Oberpfaffenhofen.
     H. Eschenauer: Vortrag über „Entstehung, Aufbau und Anwendung der Optimierungsprozedur SAPOP"
   - 1st ASMO UK/ISSMO Conference on Engineering Design Optimization, 8. bis 9. Juli 1999 in Ilkley, England.
     H. Eschenauer: Eröffnungsvortrag "Multidisciplinary Engineering Strategies for Product and Process Development – Modeling, Simulation, Optimization, Applications"
   - ECCM '99 "European Conference on Computational Mechanics", 31. August bis 3. September 1999, München.
     N. Olhoff und H. Eschenauer: Gemeinsamer Vortrag "On optimum topology design of structures"
   - ESREL'99 - European Safety and Reliability Conference, TU München-Garching, 13. – 17. September 1999.
     G.I. Schuëller: Chairman des Technical Program Committee;
     K. Marti: Keynote Lecture "Optimal Structural Design under Stochastic Uncertainty by Stochastic Linear Programming Methods"
   - Luft- und Raumfahrtkongreß der DGLR 1999; Motto: Luft- und Raumfahrt vor dem neuen Jahrtausend, 27. bis 30. September 1999 in Berlin.
     M. Grauer, T. Barth und H.A. Eschenauer: Gemeinsamer Vortrag "Cluster Computing for Treating MDO-Problems by OPTIX"
   - SOR 2000, International Conference on Operations Research, 9. – 12. September 2000, TU Dresden.
     U. Rieder: Leiter der Sektion „Stochastische Optimierung und Simulation"

K. Marti, München

FA: Materialtheorie

Dem Fachausschuss gehören derzeit an:

N. Aksel (Bayreuth)
H. Altenbach (Halle)
A. Bertram (Magdeburg)
D. Besdo (Hannover)
J. Betten (Aachen)
R. de Boer (Essen)
M. Brokate (Kiel)
O.T. Bruhns (Bochum)
W. Ehlers (Stuttgart)
H.A. Eschenauer (Siegen)
F.D. Fischer (Leoben) (Vorsitz)
N. Gebbeken (Neubiberg)
D. Gross (Darmstadt)
P. Haupt (Kassel)
K. Herrmann (Paderborn)
K. Hutter (Darmstadt)
H. Irschik (Linz-Auhof)
M. Kamlah (Karlsruhe)
R. Kienzler (Bremen)
W.B. Krätzig (Bochum)
R. Kreissig (Chemnitz)
M. Kuna (Freiberg)
U. Langer (Linz)
V.I. Levitas (Lubbock-Texas)
H. Lippmann (Garching)
O. Mahrenholtz (Hamburg)
H. Mang (Wien)
K. Marti (Neubiberg)
C. Miehe (Stuttgart)
I. Müller (Berlin)
S. Müller (Leipzig)
W.H. Müller (Edinburgh)
J. Najar (Garching)
F.G. Rammerstorfer (Wien)
M. Ruzicka (Bonn)
K.H. Schlüssler (Cottbus)
S. Schmauder (Stuttgart)
R. Schmidt (Aachen)
V. Silberschmidt (Garching)
E. Stein (Hannover)
I. Vardoulakis (Athen)
E. Werner (Garching)
P. Wriggers (Hannover)
B.W. Zastrau (Dresden)
K. Zeman (Linz)
F. Ziegler (Wien)

Die Mitglieder des GAMM Fachausschusses Materialtheorie treffen sich am 31.01.2000 in Magdeburg. Einladender ist Prof. A. Bertram

Otto-von-Guericke-Universität Magdeburg
Fakultät für Maschinenbau
Institut für Mechanik
Lehrstuhl für Festigkeitslehre
Universitätsplatz 2
D-39106 Magdeburg

Tel.: +49-(0)391-6712-607
Fax: +49-(0)391-6712-863
E-mail: bertram@mb.uni-magdeburg.de

Bei diesem Treffen soll vor allem die Bereitschaft geweckt werden, Gemeinschaftsprojekte ins Leben zu rufen. Dazu sollen Informationen über die Arbeitsgebiete der einzelnen Mitglieder zur Verfügung gestellt werden. Weiters richtet der GAMM Fachausschuss für Materialtheorie ein Volume des Archive of Applied Mechanics aus. Dazu sind neun Beiträge vorgesehen, die sich bereits im Reviewing befinden. Bis zur nächsten GAMM–Tagung ist zu erwarten, daß sämtliche Beiträge in endgültiger Form vorliegen.

F.D. Fischer, Leoben

FA: Mathematische Analyse nichtlinearer Phänomene

Jahresbericht 1999

Dem Ausschuss gehören derzeit an:

W.J. Beyn (Bielefeld)
F. Colonius (Augsburg)
B. Fiedler (Berlin)
W. Jäger (Heidelberg)
K. Kirchgässner (Stuttgart)
T. Küpper (Köln) (Vorsitz)
H. Langer (Wien)
W. Lauterborn (Darmstadt)
H.A. Mallot (Tübingen)
E. Meister (Darmstadt)
R. Mennicken (Regensburg)
A. Mielke (Hannover)
W. Möhring (Göttingen)
K. Popp (Hannover)
W. Schempp (Siegen)
J. Scheurle (Hamburg)
F.W. Schneider (Würzburg)
R. Seydel (Ulm)
B. Silbermann (Chemnitz)
H. Troger (Wien)

Der Fachausschuss hat es sich zum Ziel gesetzt, nichtlineare Phänomene aus den verschiedensten Anwendungsgebeten der mathematischen oder numerischen Analyse zugänglich zu machen. Dies geschieht einerseits durch die Aktivitäten der Mitglieder bei der Organisation von Tagungen und andererseits durch ein jährliches Treffen, das sich stets einem aktuellen Thema widmet. Im Jahr 1999 wurde das wissenschaftliche Programm von W.-J. Beyn (Bielefeld) organisiert unter dem Thema

Biomechanics of flexible structures.

Sich bewegende und reagierende Tiere zeichnen sich immer noch durch ein wesentlich flexibleres Verhalten als gegenwärtige technische Systeme aus. Beispiele hierfür sind die Koordination von Mehrkörpersystemen in Gegenwart von Hindernissen oder von elastischen Körperformen, wie sie beim Schwimmen und Fliegen eingesetzt werden. Zu der ersten Gruppe von Beispielen gehörten die Vorträge von

H. Cruse (Bielefeld):
"Control of hexapod walking: experiments and simulation"

R. Blickhan, H. Wagner, M. Seyfahrth (Jena):
"From spring to preflex: dynamic properties of the human leg".

In H. Cruses Vortrag wurde deutlich, wie sich sechsbeinige Laufmaschinen, die nur über lokale Kontrollmechanismen verfügen, bereits erstaunlich gut in unbekanntem Terrain zurechtfinden. In den Forschungsarbeiten von R. Blickhan und Mitarbeitern zu menschlichen Beinbewegungen werden verschiedenartige Muskel- und Kopplungsmodelle getestet und insbesondere lastabhängige Bifurkationen und Optimierungsfragen untersucht.

Der zweiten Gruppe von Beispielen gehörten die weiteren Vorträge an

J. van Leeuwen (Wageningen):
"The mechanical design of the trunk muscles in fish: why fish myomeres are myomere shaped"

Ch. Jordan (Seattle):

"The mechanics of undulatory swimming in soft-bodied animals:
stability and control by design"

Ch. Alscher (Bielefeld):
"A dynamical model of the hydrostatic skeleton of the leech"

Während J. van Leeuwen in seinem Beitrag erläuterte, wie die mechanischen Anforderungen des Schwimmens gewisse Muskelformen und -stärken erzwingen, behandelten die beiden anderen Vorträge ein interessantes Prinzip, das Weichtiere zur Fortbewegung benutzen: das hydrostatische Skelett. Die Modellierung solcher Systeme führt auf Algebrodifferentialgleichungen Ungleichungsbedingungen zu berücksichtigen, und bei einer Kopplung an die Hydrodynamik müssen auch die Strömungsgleichungen mit zeitabhängigen Rändern gelöst werden. Hier wurden bislang nur Teilaspekte modelliert, und es ergibt sich für Nachwuchsmathematiker ein reichhaltiges Betätigungsfeld.

Alle Vorträge wurden durch Videos zu Computersimulationen begleitet und boten so auch einen anschaulichen Eindruck dieses in rascher Entwicklung befindlichen Forschungsgebietes.

Das Fachausschuss-Treffen wurde unterstützt aus Mitteln der GAMM, DFG, der Stemmler-Stiftung und der Käthe-Hack-Stiftung, so dass auch Diplomanden und Doktoranden die Möglichkeit hatten, am wissenschaftlichen Programm teilzunehmen.

Das nächste Fachausschuss-Treffen wird wiederum in Oberwolfach stattfinden, und zwar vom 03.–05. November 2000. Als wissenschaftliches Thema ist geplant:

Die nichtlineare Dynamik neuronaler Netze

Als einer der Hauptvortragenden wird voraussichtlich Herr Prof. Martin Heisenberg (Lehrstuhl für Genetik der Universität Würzburg) teilnehmen. Die Koordination liegt in den Händen von F.W. Schneider, R. Seydel und T. Küpper.

Interessenten sollten sich rechtzeitig mit mir in Verbindung setzen.

T. Küpper, Köln

FA: Analysis von Mikrostrukturen

Jahresbericht 1999 (Zeitraum vom 01.01.1999 bis 31.12.1999)

Der Fachausschuss hat sich in Hannover am 22.09.1998 konstituiert; ihm gehören derzeit an:

C. Carstensen (Kiel) (Vorsitz)
S. Müller (Leipzig)
P. Wriggers (Hannover)
M. Berveiller (Metz) (assoziiert)
A. Mielke (Stuttgart)
E. Stein (Hannover)
H.-D. Alber (Darmstadt) (assoziiert)

Intressierte GAMM-Mitglieder seien herzlich zur Mitarbeit aufgerufen.

Aktivitäten im Berichtszeitraum:

- Minisymposium: Phase transitions in inelastic materials, Cancun, Mexico, 05. – 13. Januar 1999, Plasticity 99, International Symposium on Plasticity and Its Current Applications, Organisatoren: V. Levitas, E. Stein

- Minisymposium: Homogenization of Materials with Microstructure and Texture,
  Metz, 12. April 1999, GAMM Annual Meeting,
  Organisatoren: A. Bertram, S. Müller
  WWW-Info: `http://www.lpmm.univ-metz.fr/gamm99`
- Minisymposium: Phase transitions in inelastic materials,
  Metz, 12. – 16. April 1999, GAMM Annual Meeting,
  Organisatoren: F.D. Fischer, V. Levitas, E. Stein
  WWW-Info: `http://www.lpmm.univ-metz.fr/gamm99`
- Oberwolfach-Tagung: Numerik von Mikrostrukturen,
  Oberwolfach, 25. April – 01. Mai 1999,
  Organisatoren: C. Carstensen, W. Hackbusch, M.B. Luskin
  WWW-Info: `http://www.mfo.de/Meetings/#T9917a`
  und: `http://www.numerik.uni-kiel.de/cc/gammfaAM.html`
- DFG-Schwerpunktprogramm „Analysis, Modellbildung und Simulation von Mehrskalenproblemen“,
  Koordinatoren: F. Bornemann, H. Herrmann, S. Luckhaus, A. Mielke, S. Müller
  Genehmigt von der DFG am 07. Mai 1999.
  Voraussichtlicher Projektbeginn im Oktober 2000.
  WWW-Info: `http://www.dfg.de/aktuell/info_wissenschaft/schwerpunktprogramme/info_wissenschaft_40_99.html`
- Workshop: Analysis von Mikrostrukturen, Leipzig, 17. und 18. Mai 1999,
  Organisatoren: C. Carstensen, S. Müller
  WWW-Info: `http://www.mis.mpg.de/conferences/avm99/index.html`
- DMV-Seminar: Nonlinear Partial Differential Equations: Oscillations, Singularities, and Microstructure, Oberwolfach, 23. – 29. Mai 1999,
  Organisatoren: G. Friesecke, S. Müller, F. Otto
  WWW-Info: `http://www.mfo.de/DMV_Seminars/DMV_Seminars_1999.html#T9921B`
- Tagung: Mathematical Aspects of Materials Science: From Atomic to Continuum Scales,
  Schloss Ringberg, 20.–26. Juni 1999,
  Organisatoren: G. Friesecke, R.D. James, S. Müller, E.K.H. Salje
  WWW-Info: `http://www.numerik.uni-kiel.de/cc/gammfaAM.html`
- ICIAM 99 - Hauptvortrag: Magnetic Microstructures - an Example of Multiscale Phenomena, Edinburgh, 07.–09. Juli 1999, ICIAM 99,
  Vortragender: S. Müller
  WWW-Info: `http://www.ma.hw.ac.uk/cgi-bin/ICIAM_singlePerson.pl?letter=C&number=909`
- Minisymposium: Micromagnetics and Magnetic Materials,
  Edinburgh, 08. Juli 1999, ICIAM 99
  Organisatoren: S. Müller, A. DeSimone
  WWW-Info: `http://www.ma.hw.ac.uk/cgi-bin/ICIAM_singleMSP.pl?mspcode=msp098`
- Minisymposium: Computational Methods for Microstructures and Modelling of Materials,
  Edinburgh, 09. Juli 1999, ICIAM 99,
  Organisatoren: C. Carstensen, P. Plechač
  WWW-Info: `http://www.ma.hw.ac.uk/cgi-bin/ICIAM_singlePerson.pl?letter=C&number=909`

- SFB-Workshop: International Conference on Multifield Problems, Stuttgart, 06. – 08. Oktober 1999, mit verschiedenen Minisymposien zum Thema Mikrostrukturen
  WWW-Info:
  `http://enterprice.mathematik.uni-stuttgart.de/sfb404/veranstaltungen/tagung99/index.html`

Geplante Aktivitäten in 2000:

- Oberwolfach-Tagung: Mathematical Continuum Mechanics,
  Oberwolfach, 20. – 26. August 2000,
  Organisatoren: J.M. Ball, R.D. James, S. Müller
  WWW-Info: `http://www.mfo.de/Meetings/Meeting_Program_2000.html#T0034`
- Sommerschule: Vienna Summer School on Microstructures,
  Wien, 25. – 29. September 2000,
  Organisatoren: C. Carstensen, G. Schranz-Kirlinger
  WWW-Info: `http://www.numerik.uni-kiel.de/lfwr/som00.html`

Aktuelle Informationen über die Ziele und Aktivitäten des Fachausschusses finden sich auf der Internetseite

`http://www.numerik.uni-kiel.de/cc/gammfaAM.html`

C. Carstensen, Kiel

FA: Dynamik und Regelungstheorie

Jahresbericht 1999

Dem Fachausschuss „Dynamik und Regelungstheorie“ gehören zur Zeit folgende Mitglieder an:

A. Ams (Karlsruhe)
E. Brommundt (Braunschweig)
F. Colonius (Augsburg)
H. Hahn (Kassel)
M. Hanke (Stockholm)
B. Heimann (Hannover)
U. Helmke (Würzburg)
D. Hinrichsen (Bremen)
H.W. Knobloch (Würzburg)
E. Kreuzer (Hamburg)
R. März (Berlin)
V. Mehrmann (Chemnitz)
P.C. Müller (Wuppertal((Vorsitzender)
G.P. Ostermeier (Berlin)
F. Pfeiffer (München)
K. Popp (Hannover)
D. Prätzel-Wolters (Kaiserslautern)
K. Reinschke (Dresden)
P. Rentrop (Darmstadt)
J. Scheuerle (München)
W. Schiehlen (Stuttgart)
K. Schlacher (Linz)
K.R. Schneider (Berlin)
H. Troger (Wien)
W. Wedig (Karlsruhe)

Zudem sind eine Reihe ständiger Gäste assoziiert, unter anderem auch um die Verbindung zum Fachausschuss „Mathematische Analyse nichtlinearer Phänomene“ zu pflegen.

Die Kooperation mit dem Ausschuss 1.40 über „Theoretische Verfahren der Regelungstechnik“ der VDI/VDE-Gesellschaft für Meß- und Automatisierungstechnik (GMA) hat sich weiter vertieft. Nach einem ersten gemeinsamen Workshop in 1998 fand am 01./02.03.1999 ein zweiter

erfolgreicher Workshop an der Universität-GH Kassel statt. Die Vorträge werden in einem Berichtsband mit Kopien der Vortragsfolien dokumentiert. Die erneute positive Resonanz führte zu der Entscheidung, unsere Kooperation fortzusetzen und am 28./29.02.2000 einen dritten gemeinsamen Workshop wiederum in Kassel durchzuführen. Dieser Workshop wird noch um ein Arbeitsgespräch über den Themenbereich „Systemidentifikation und Parameterschätzung bei (nicht–)linearen dynamischen Systemen“ ergänzt werden.

Die 15. Sitzung des Fachausschusses fand am 11.10.1999 in Hannover am Institut für Mechanik statt. In sechs Vorträgen wurden erneut Themen aus dem gesamten Spektrum des Fachausschusses behandelt, von der Schwingungstechnik bis zur Regelungsmathematik. Für die GAMM-Tagung 2001 in Zürich wurden Vorschläge für Hauptvorträge, Minisymposien und Sektionsleiter erstellt, die dem Programm-Komitee zugeleitet wurden. Die Ausschussmitglieder informierten sich gegenseitig über aktuelle wissenschaftliche Tagungen. Hierzu gehörten u.a.

- 3rd IMACS Symposium on Mathematical Modelling (3rd MATHMOD), Wien, Österreich, 02.–04.02.2000
- 5. Workshop über DAE/Deskriptor-Systeme, Paderborn, 13.–17.03.2000 (Veranstalter: P.C. Müller, Wuppertal)
- 14th International Symposium on Mathematical Theory of Network and Systems (MTNS 2000), Perpignan, Frankreich, 19.–23.06.2000
- 1st IFAC Conference on Mechatronic Systems (MECHATRONICS 2000), Darmstadt, 18.–20.09.2000
- 6. Tagung über „Dynamische Probleme – Modellierung und Wirklichkeit“, Hannover, 05.–06.10.2000 (Veranstalter: H. G. Natke, Hannover)

Weiterhin ist eine Selbstdarstellung des Fachausschusses im Internet geplant.

Weitere Informationen können vom Vorsitzenden erhalten werden:

E-mail: `mueller@srm.uni-wuppertal.de`.

P.C. Müller, Wuppertal

FA: Scientific Computing

Jahresbericht 1999

Dem Ausschuss gehören derzeit an:

H.G. Bock (Heidelberg)
P. Deuflhard (Berlin)
H.W. Engl (Linz)
A. Frommer (Wuppertal)
M. Grauer (Siegen)
W. Hackbusch (Kiel/Leipzig)
R. Jeltsch (Zürich)
R. Kornhuber (Berlin)
E. Krause (Aache)
D. Kröner (Freiburg)
U. Langer (Linz)
A.K. Louis (Saarbrücken)
W. Mackens (Hamburg)
H. Neunzert (Kaiserslautern)
W. Niethammer (Karlsruhe)
U. Rüde (Augsburg)
S. Sauter (Zürich)
J. Sprekels (Berlin)
E. Stein (Hannover)
H.J. Stetter (Wien)
L. Tobiska (Magdeburg)
H. Voss (Hamburg)
W. Wendland (Stuttart)
G. Wittum (Heidelberg) (Vorsitz)

Der Fachausschuss beteiligte sich im vergangenen Jahr an der Organisation der folgenden Veranstaltungen:

- 30.05.-04.06.1999: Oberwolfach Konferenz „Effiziente Löser für partielle Differentialgleichungen“
- 06.-23.09.1999: Sommerschule Numerical Simulation of Flows
  Veranstalter: Jeltsch, Kröner, Munz, Wittum
  Ort: Heidelberg, Karlsruhe, Stuttgart, Zürich
  36 Teilnehmer; unterstützt von SFB 359, AMIF, EMS, WiR

Ferner waren die Mitglieder des Fachausschusses an zahlreichen weiteren Konferenzen im In- und Ausland beteiligt.

Geplant sind die folgenden Veranstaltungen:

- 16.-17.02.2000: Workshop Parallele Simulation reaktiver Strömungen
- 30.10.-02.11.2000: GAMM Seminar “Modelling and Computation in Environmental Sciences”
  Veranstalter: P. Bastian, R. Helmig, W. Jäger, W. Kinzelbach, G. Wittum
  Ort: Bad Herrenalb; unterstützt von SFB 359

G. Wittum, Stuttgart

FA: Experimentelle Mechanik

Jahresbericht 1999

Dem Ausschuss gehören derzeit an:

H. Aben (Tallinn)
I. Andresen (Braunschweig)
A. Dinkelacker (Göttingen)
J. Eberhardsteiner (Wien)
H. Eckelmann (Göttingen)
F. Ferber (Parderborn)
F.W. Hecker (Braunschweig)
A. Hirchenhain (Beverungen)
St. Holy (Prag)
H. Irretier (Kassel)
W. Jüptner (Bremen)
K.-L. Kotte (Dresden)
K.-H. Laermann (Wuppertal) (Sprecher)
F. Laugwitz (Magdeburg)
R. Markert (Darmstadt)
G.E.A. Meier (Göttingen)
W. Merzkirch (Essen)
J. Naumann (Chemnitz)
W. Schumann (Zürich)
K. Ullmann (Zwickau)
F. Wahl (Magdeburg)
H. Weber (Karlsruhe)

Aus Gründen die im persönlichen Bereich einiger Mitglieder lagen, fand in 1999 kein Treffen des FA statt. Deshalb mußte auch ein geplanter Workshop über die Frage der Modellbildung in der Experimentellen Mechanik auf das Jahr 2000 verschoben werden. Die Kontakte innerhalb des FA beschränkten sich im Wesentlichen auf die Korrespondenz, die sich vorwiegend auf die Vorbereitungen der Jahrestagungen 2000 und 2001, Sektion 8 „Experimentelle Methoden und Identifikation“ bezogen. Die Kollegen Prof. Merzkirch und Prof. Naumann, sowie der Sprecher des FA haben auch für 2001 die Leitung der Sektion 8 übernommen. Seitens des FA wurde für die Jahrestagung GAMM 2000 ein Minisymposium „Experimentelle Beanspruchungsanalyse in der Mikromechanik“ konzipiert und organisiert, besetzt mit kompetenten Referenten.

Die Bemühungen um neue Mitglieder, insbesondere aus dem Bereich der Strömungsmechanik wurden fortgesetzt (Briefaktion), - bisher leider mit mäßigem Erfolg. Der Fachausschuss wäre dankbar, aus dem Gesamtbereich der GAMM heraus in diesen Bemühungen Unterstützung zu finden.

K.-H. Laermann, Wuppertal

Announcement of the European Mathematical Society

Information about the

Felix Klein Prize[2)]

from Prof. Rolf Jeltsch, the EMS President

Introductory note:

The idea of a Felix Klein prize was born on the first day of the ICIAM99 meeting in Edinburgh during a discussion between the winner of the 1999 Pioneer prize, Helmut Neunzert, and the president of the EMS. Two days later, Heinz Engl, chair of EMS's Applied Mathematics Committee, joined in and a first draft of the specifications was completed. The executive committee approved the wording of the draft at its meeting in Zurich, October 9–10, 1999. Renate Tobies's article shows why the name Felix Klein was chosen.

Rolf Jeltsch
ETH Zürich
Präsident der EMS

Why a Felix Klein Prize?[3)]

by Renate Tobies of Kaiserslautern

Nowadays, mathematics plays an ever greater role-often the decisive role-in finding solutions to numerous technical, economical and organisational problems. In order to encourage such solutions and to reward exceptional research in the area of applied mathematics the EMS decided, in October 1999, to establish the Felix Klein Prize.

The mathematician Felix Klein (1849–1925) is generally acknowledged as a pioneer with regard to the close connection between mathematics and applications which lead to solutions to technical problems. Klein's success in his efforts to open up modern mathematical methods and theories to wider circles was based on his international reputation as a renowned mathematician. His contributions to pure mathematics include not only the well-known systematisation of geometrical fields in his "Erlanger Programm" (1872) but covered nearly all fields of mathematics. These contributions were collected in three volumes in his "Gesammelte Mathematische Abhandlungen" (1921–1923). David Hilbert (1862–1943), whom Klein supported and whose call to Göttingen he arranged in 1895, was impressed with Klein's striking geometrical perception. Hilbert emphasised Klein's outstanding results in the area of automorphic functions and the scientific vision that was evident in the undertaking "Encyklopädie der mathematischen Wissenschaften mit Einschluss ihrer Anwendungen" (1895–1935), a comprehensive work of international authorship. When the Berlin mathematicians – who over a long period had remained sceptical of Klein's application-oriented endeavours – elected him as corresponding

[2)] The call for nominations for the Felix Klein Prize is printed on page 73

[3)] This article was published in the EMS newsletter of December, 1999.

member to the Berlin Academy of Science in 1913, their election recommendation stated: "Klein [is] one of the few mathematicians who is still capable of an overall view of mathematics", (full citation in Tobies 1999).

Klein was aware that abstract-oriented, pure mathematics was in danger of becoming isolated. In the 1890's engineers and technicians, who lamented a mathematical education which was remote from practicality, set in motion an anti-mathematics movement. In order to change the public image of mathematics and create greater awareness for the usefullness of modern mathematical methods, Klein not only turned his own research to applied mathematics and application-oriented themes, but also smoothed the way for others with diverse measures. His valuable results on the application of mathematics was aptly described by Richard von Mises (1883–1953), founder of the journal "Zeitschrift für angewandte Mathematik und Mechanik", thus:

A good part of [Klein's] work on linear differential equations must be counted here [...]: for the main part they are concerned with so-called oscillation theories, which are crucial to problems of stability and eigenfrequencies of mechanical (and other) systems. A few treatises deal with questions relating to geometrical optics, [such as] the theory of refraction in optical instruments. It is within various areas of mechanics, however, that Klein has ventured deepest into applied areas. He succeeded in promoting the kinematics of rigid bodies by developing English research which was virtually unknown in Germany at the time, (Robert Ball, definition of spiral or "dyname") [...] and he searched for related areas in "technical mechanics", i.e. direct solutions to real-world problems [...]. The outstanding teaching material originating from the lectures in Göttingen by Klein and Sommerfeld on the theory of rigid bodies reaches [...] into technical problems dealing with gyroscopes and gyro-compasses, yawing of vessels, etc. Together with K. Wieghardt, Klein published a theory of stresses in plane-truss assemblies based on an imaginative combination of Maxwellian reciprocal figures and Airy stress functions – a theory which has proved its fruitfulness up until present times for dealing with problems occurring in the statics of structures (Richard von Mises, Felix Klein. ZAMM **4** (1924), 87–88).

However, in order to bring about change, it was not sufficient for Klein alone to yield up research results. Numerous and diverse scientific measures were necessary to activate the – in Germany, long-neglected – areas of applied mathematics. Around the turn of the century, Klein succeeded, together with many allies, in bringing about much improved conditions for the development of applied mathematics.

One of these developments was a new examination curriculum which was passed in 1898 and which introduced and regulated – for the first time at a Prussian university – the teaching of applied mathematics. The course programme included a choice of core subjects in descriptive geometry, geodesy, and technical mechanics (kinematics, graphical statics). The number of subjects was extended in following years to include numerical and graphical methods, insurance mathematics and statistics, hydrodynamics and aerodynamics. The advent of such specialised teaching in applied mathematics made the establishment of corresponding subject areas necessary and eventually led to the creation of the first professorships in Germany in applied mathematics. Not only was Klein successful in convincing government ministeries, he also gained support for his plans from heads of industry. Within the framework of the "Göttinger Vereinigung zur Förderung der angewandten Physik und Mathematik" affluent circles supported Klein's endeavours with over 2 million Goldmarks between 1898 and 1920.

The decision to produce a journal devoted to applied mathematics a further element of Klein's

programme. For this, in 1900 the – already existing – "Zeitschrift für Mathematik und Physik" was transformed and became what is acclaimed as the precursor of the "Zeitschrift für angewandte Mathematik und Mechanik". In order to change the public image of mathematics it was not sufficient to limit activities to the universities. Klein strived in an international context – in 1908 at the IV International Congress of Mathematicians in Rome, he was elected as chairman of the International Commission of Mathematical Instruction – for a reform of the teaching of mathematics "from primary school to university". Special emphasis was place on nurturing close relations between high-level science and perspicuous, applications-oriented mathematics. The fact that the group of Göttingen's mathematicians achieved international renown was due, in a great measure, to Klein's programme to develop mathematics in all directions and enable results of pure mathematical research to flow into applied areas combining the interests of academe and industry. Klein implemented an adroit appointment policy (David Hilbert, Ludwig Prandtl and Carl Runge) to achieve an ideal balance in the combination of theory, application and numerical mathematics. Close co-operation between scientists and their students produced valuable contributions for the development of mathematics and its applications.

Scienstists who can prove, in a prominent and commendable way, that mathematical theory and mathematical models lead to practical solutions of problems, and who thereby contribute to and influence the future growth of the mutual stimulation of theory and practice, are following in the footsteps of Felix Klein and are worthy candidates and eligible for the award of the Felix Klein Prize.

Dr. Renate Tobies
Department of Mathematics
University of Kaiserslautern

Translation: Angela Rast-Margerison

European Mathematical Society

AGENDA 2000

February – March 2000

Voting for delegates of individual members.
(Contact: EMS Secretariat, E-mail: tuulikki.makelainen@helsinki.fi)

March 1, 2000

Deadline for submissions of nominations for the Felix Klein Prize.
(Contact: EMS Secretariat, E-mail: tuulikki.makelainen@helsinki.fi)

March 24 – 25, 2000

Executive Committee Meeting hosted by the Polish Mathematical Society and the Institute of Mathematics of the Polish Academy of Sciences in Bedlevo, near Poznań. (Poland)

May 15, 2000

Deadline for submission of information or papers to the June issue of EMS Newsletter.
(Contact: Robin Wilson, E-mail: r.j.wilson@open.ac.uk)

June 2000

EMS Lectures by Prof. George Papanicolaou, Stanford University, USA
June 13 – 16 at ETH (Zurich, Switzerland) on "Financial Mathematics"
June 18 – 20 at the University of Crete (Herakleion, Crete, Greece) on "Time Reversed Acoustics"
(Contact: David Brannan, E-mail: Mcs-Dean@open.ac.uk)

June 17 – 22, 2000

EURESCO Conference in Mathematical Analysis at Castelvecchio Pascoli (Italy) on "Partial Differential Equations and their Applications to Geometry and Physics".
Organizers: J. Eichhorn (Greifswald, Germany).
This Series of Conferences are financed by ESF.
(Contact: E-mail: euresco@esf.org)

July 3 – 7, 2000

ALHAMBRA 2000
A joint Mathematical European–Arabic Conference in Granada (Spain).
(Promoted by the EMS and the Spanish Royal Mathematical Society.)
(Contact: Ceferino Ruiz, E-mail: ruiz@ugr.es)
(Information: `http://www.ugr.es/~alhambra2000`)

July 6, 2000

Executive Committee Meeting in Barcelona (Spain).

July 7 – 8, 2000

Council Meeting in Barcelona (Spain)
(Contact: EMS Secretariat, E-mail: tuulikki.makelainen@helsinki.fi)

July 10 – 14, 2000

Third European Congress of Mathematics (3ecm) in Barcelona (Spain).
(Contact: E-mail: 3ecm@iec.es)
(Information: `http://www.iec.es/3ecm/`)

July 24 – August 3, 2000

EMS Summer School at Edinburgh (Great Britain) on "New analytic and geometric methods in inverse problems".
Organizers: Erkki Somersalo, Otaniemi, Finland.
(Contact: Erkki Somersalo, E-mail: Erkki.Somersalo@hut.fi)

August 15, 2000

Deadline for submission of information or papers to the September issue of EMS Newsletter.
(Contact: Robin Wilson, E-mail: r.j.wilson@open.ac.uk)

August 17 – September 2, 2000

EMS Summer School at Saint-Flour, Cantal (France) on "Probability theory".
Organizers: Pierre Bernard, Clermont-Ferrand, France.
(Contact: Pierre Bernard, E-mail: bernard@ucfma.univ-bpclermont.fr)

Autumn 2000

Diderot Mathematical Forum on "Mathematics and Telecommunication".
Programme to be announced.
(Contact: Jean-Pierre Bourguignon, E-mail: jpb@ihes.fr)

September 22 – 27, 2000

EURESCO Conference in Number Theory and Arithmetical Geometry at Obernai (near Strasbourg), France on "Motives and Arithmetic".
Organizers: U. Jannsen, Regensburg, Germany.
This Series of Conferences are financed by ESF.
(Contact: E-mail: euresco@esf.org)

September 30, 2000

Deadline for proposals for 2001 EMS lectures.
(Contact: David Brannan, E-mail: Mcs-Dean@open.ac.uk)

October 14 – 15, 2000

Executive Committee Meeting hosted by the London Mathematical Society

November 15, 2000

Deadline for submission of information or papers to the September issue of EMS Newsletter.
(Contact: Robin Wilson, E-mail: r.j.wilson@open.ac.uk)

Ankündigung der

Deutschen Physikalischen Gesellschaft

2000: Jahr der Physik

Am Montag 6. Dezember 1999, hat die Bundesministerin für Bildung und Forschung, Frau Edelgard Bulmahn, eine bundesweite Initiative

Wissenschaft im Dialog

gestartet.

Die mehrjährige Initiative beginnt im Jahr 2000 mit dem

Jahr der Physik.

Neben fünf zentralen Veranstaltungen werden überall in Deutschland an Universitäten, an Forschungseinrichtungen und an Schulen Aktionen und Experimente zum Jahr der Physik stattfinden.

Ziel der Initiative ist, die Menschen für Wissenschaft und Forschung zu begeistern und den Wissenschaftlerinnen und Wissenschaftlern die Chance zu geben, ihre Arbeiten vorzustellen und transparent zu machen.

Inhaltlich und organisatorisch arbeitet hier das Bundesministerium für Bildung und Forschung, BMBF, eng mit der Deutschen Physikalischen Gesellschaft, DPG, zusammen.

Falls Sie selbst Interesse haben, diesen Dialog zwischen Wissenschaft und Gesellschaft mit einer eigenen Veranstaltung fördern zu helfen, bieten wir Ihnen die Verwendung unseres LOGO's

„2000: das jahr der physik“

an, sowie die Aufnahme in unseren Veranstaltungskalender. Zusätzlich erhalten Sie ein speziell für die dezentralen Veranstaltungen entwickeltes „PR-Paket“, das in der Januar-Ausgabe der „Physikalischen Blätter“ vorgestellt wird.

Das Logo ist hier bereits abrufbar über:

`http://www.dpg-physik.de/logo2000.htm`

Wenn Sie das Logo – für welchen Zweck auch immer – verwenden wollen, so wären wir Ihnen für eine entsprechende Mitteilung dankbar.

Bitte wenden Sie sich dazu direkt an folgende

E-mail-Adresse: w.richter@iser-putscher.de Fax: +49-(0)2224-9519519

und teilen Sie bitte folgendes mit:

- Ihren Namen und Ihre Anschrift incl. Telefon etc.
- Thema und Ziel der Veranstaltung.
- Eine kurze Inhaltsangabe oder Beschreibung der Veranstaltung.
- Eine Abschätzung, wieviele Personen (Zuhörer, z.B.) mit dieser Veranstaltung erreicht werden.
- Falls Sie nicht einem Hochschulinstitut oder einer der bekannten Forschungseinrichtungen

angehören, geben Sie bitte noch eine Referenzadresse (z.B. eine Schul-Leitung) an.

- Vor einer kommerziellen Verwendung bitten wir, hierfür eine explizite Genehmigung einzuholen, Adresse wie oben.

Sie erhalten dann umgehend ein Passwort mitgeteilt, mit dem Sie von einer speziellen Internetadresse sich unser LOGO in höherer Auflösung herunterladen können.

Ihre solchermassen registrierte Veranstaltung können Sie dann als

Dezentrale Veranstaltung (von)/ (der Initiative) „2000: Das Jahr der Physik“

bezeichnen. Bitte haben Sie Verständnis für den kleinen Verwaltungsakt, wir hätten gerne am Ende des Jahres eine Abschätzung für die Zahl und den Umfang der Aktionen.

Vielleicht sehen Sie sich auch schon einmal unsere Internet-Seite an:

`http://www.physik-2000.de/`

Im Namen des Vorstandes der Deutschen Physikalischen Gesellschaft (DPG) wünsche ich Ihnen viel Erfolg!

Mit freundlichen Grüßen,

Prof. Heiner Müller-Krumbhaar
(Koordinator der DPG für die Aktionen zu „2000: Jahr der Physik“)

Call for Proposals of

Scientific Meetings

in the

International Mathematical Banach Center

Warsaw, Poland

The Institute of Mathematics of the Polish Academy of Sciences announces a competition for organizing **scientific meetings in mathematics and applied mathematics** in the International Mathematical Banach Center (Warsaw, Poland), for the years 2001 – 2002. Interdisciplinary meetings related to mathematics and foreign organizers are particularly welcome.

The **meetings could take forms of semesters, minisemesters, conferences, workshops, and also intensive schools for graduate students**. The Banach Center provides an essential financial support. Independently, there are many possibilities to obtain additional funds.

The **deadline for applications is April 15, 2000**. At the beginning of May, the Scientific Council of the Banach Center, chaired by Professor Friedrich Hirzebruch, will consider applications. The selected applications will be included in the official program of the Banach Center for the years 2001 – 2002.

Independently of the above meetings, the Banach Center organizes, the so-called **reasearch groups**, i.e., smaller gatherings for 2 – 15 persons. Applications for research groups are independent of bigger conferences/semesters, can be submitted at any time (preferably about 4 – 6 months in advance), and the acceptance procedure is much simplified.

Now at the age of electronic communication, practically all organizational work can be done via e-mail. Because of that, there are no restrictions on location of the organizers.

Additional information, including application procedure, can be obtained

Secretary
Banach Center
Mokotowska 25
P.O.Box 137
00-950 Warsaw
Poland

Tel.: +48-22-628-0192
Fax: +48-22-622-5750
E-mail: office@banach.impan.gov.pl
Internet: `http://www.impan.gov.pl/BC`

Prof. Dr. Roman Dwilewicz
Scientific Director
Institute of Mathematics
Polish Academy of Sciences
E-mail: rd@impan.gov.pl

WISSENSCHAFTLICHE TAGUNGEN[1)]

GAMM–Veranstaltungen

June 19 – 23, 2000

The third international workshop on Automatic Differentiation, AD 2000 – from Simulation to Optimization, Nice, Cote d'Azur, France

Sponsored by GAMM

AD 2000 will be organized locally by INRIA Sophia-Antipolis under the direction of an international program committee. It represents a follow up on the two previous workshops held in Breckenridge (USA) in 1991 and in Santa Fe (USA) in 1996. Special emphasis will be placed on relationships and synergies between AD techniques and other software tools such as compilers and parallelizers. Apart from the recent advances in research and software development conference topics include applications of AD to optimization, ODEs/DAEs, inverse problems, biomedical research, and mathematics of finance.

Invited presentations have been confirmed by W. Klein (Siemens, Munich), D. Fylstra (Frontline Syst. Nev), J. More (Argonne, Ill.), S. Watte (U London, Ontario), D. Keyes (NASA, Langley), B. Walster (Sun Micro Systems), V. Selmin (Alenia, Turin), N.N. Cadoe (Lyon), F. Bodin (IRISA, Rennes), S. Hague (NAG, Oxford), O. Pironneau (U Paris), F.-X. LeDimet (U Grenoble).

Organizing Committee: G. Corliss, C. Faure, A. Griewank, L. Hascoet, U. Naumann

Info: Laurent Hascoet, INRIA Sophia Antipolis, 2004 route de lucioles, F-06902 Sophia Antipolis, France, E-mail: Laurent.Hascoet@sophia.inria.fr,
Internet: `http://www-sop.inria.fr/tropics/ad2000`

June 27 – 29, 2000

4th GAMM/IFIP Workshop on "**Stochastic Optimization: Numerical Methods and Technical Applications",** Universität der Bundeswehr München, Germany

Sponsored by
GAMM, IFIP (International Federation for Information Processing), UniBwM (Federal Armed Forces University Munich)

Scope: The objective of this Workshop is to bring together scientists from Stochastic Programming and from thos Engineering areas, where Mathematical Programming models are common tools, as e.g. in Optimal Structural Design, Optimal Topology Design, Design of "New Materials", Optimal Path Planning for Robots, Power Dispatch, etc.

The effects of taking into account the inherent randomness of some parameters of these problems, i.e. considering Stochastic Programming instead of Mathematical Programming models in order to get solutions being more reliable, more robust, but not more expensive,

[1)] Eine Übersicht über alle noch aktuellen, bisher in einem GAMM–Rundbrief veröffentlichten Tagungen finden Sie in der WWW homepage der GAMM
`http://www-GAMM.uni-regensburg.de/`

shall be discussed.

On the other hand, the Workshop will cover all aspects of approximations of (linear and nonlinear) stochastic optimization problems for designing appropriate numerical solution procedures for stochastic programs, as e.g. Taylor expansions, discretization, decomposition methods, stochastic approximation, response surface and DOE methods. Furthermore, stochastic optimization methods under real time conditions shall be discussed.

Topics:

- Approximation Methods for Stochastic Optimization Problems
- Numerical Methods for Solving Stochastic Programs
- Stochastic Optimization under Real Time Conditions
- Structural Optimization, Topology Optimization, Optimal Design, Robust Design
- Optimal Path Planning for Robots, etc.
- Resampling for optimization and prediction
- Stochastic restrictions, Bayes procedures and Markov Chain Monte Carlo Simulation

Info: Prof. Dr. K. Marti, 4th GAMM/IFIP Workshop, Fakultät für Luft- und Raumfahrttechnik, Institut für Mathematik und Rechneranwendung, Universität der Bundeswehr München, Werner-Heisenberg-Weg 39, D-85577 Neubiberg/München, Germany, Tel. +49-(0)89-6004-2541/2560, Fax: +49-(0)89-6004-4092,
E-mail: kurt.marti@unibw-muenchen.de,
Internet:
`http://www.unibw-muenchen.de/campus/LRT/LRT1/frame/professur1/WORKSHOP/workshop.html`

September 19 – 22, 2000

GAMM–IMACS International Symposium on Scientific Computing, Computer Arithmetic and Validated Numerics, SCAN 2000, Karlsruhe, Germany

The conference continues the series of scan–symposia which have previously been held at Karlsruhe, Basel, Albena, Oldenburg, Wien, Wuppertal, Lyon, and Budapest under the joint sponsorhip of GAMM and IMACS. These conferences have traditionally covered the numerical and algorithmic aspects of scientific computing, with a strong emphasis on validation and verification of computed results as well as on arithmetic, programming, and algorithmic tools for this purpose. The objectives are to propagate current applications and research as well as to promote a greater understanding and increased awareness of the subject matters.

International Steering Committee and GAMM–Fachausschuss „Rechnerarithmetik und wissenschaftliches Rechnen“: J. Albrecht (Clausthal-Zellerfeld), G. Alefeld (Karlsruhe), G.F. Corliss (Milwaukee, WI, USA), T. Csendes (Szeged, HU), A. Frommer (Wuppertal), G. Heindl (Wuppertal), J. Herzberger (Oldenburg), K.-U. Jahn (Leipzig), E. Kaucher (Karlsruhe), R.B. Kearfott (Lafayette, LA, USA), W. Klein (München), V. Kreinovich (El Paso, TX, USA), U. Kulisch (Karlsruhe), D. Matula (Dallas, TX, USA), G. Mayer (Rostock), J.-M. Müller (Lyon, F), M. Plum (Karlsruhe), L.B. Rall (Madison, WI, USA), J. Rohn (Praha, CZ), S.M. Rump (Hamburg), H. Schwandt (Berlin), H.J. Stetter (Wien, A), W.V. Walter (Dresden), J. Wolff von Gudenberg (Würzburg),

T. Yamamoto (Matsuyama, JPN), Z. Shen (Nanjing, CHN)

Conference Chairmen: Ulrich Kulisch and Wilfried Juling (Universität Karlsruhe (TH))

Info: SCAN 2000, Axel Facius, Institut für Angewandte Mathematik, Universität Karlsruhe (TH), D-76128 Karlsruhe, Germany,
Fax: +49-(0)721-38-59-79 or +49-(0)721-69-52-83, E-mail: info@scan2000.de,
Internet: `http://www.scan2000.de/contact.html`

February 12 – 15, 2001

GAMM Annual Meeting, GAMM 2001, Zürich, Switzerland

We do expect to receive funds from the Swiss National Science Foundation (SNSF) to financially support participants from Central and Eastern European Countries and New Independent States (CEEC/NIS). The following beneficiary countries are eligible for participation: Albania, Bulgaria, the Czech Republic, Hungary, Kirghizstan, Macedonia, Poland, Romania, Russia, Slovakia, Slovenia and the Ukraine.

Please note that for such an application for support we need the following information by July 1st, 2000.

- Curriculum Vitae containing age, name, full address of home institution, scientific background, description of scientific career.
- Description of contribution to the conference. Here, at least the abstract of the contributed paper should be supplied.
- An estimate for the needed support.

More information will be given in the invitation to GAMM 2001.

Info: GAMM 2001 Conference Office, Seminar for Applied Mathematics, ETH-Zentrum HG G57.1, CH-8092 Zürich, Switzerland
E-mail: GAMM@math.ethz.ch
Internet: `http://www.GAMM2001.ethz.ch/`

Mathematisches Forschungsinstitut Oberwolfach

Lorenzenhof

D–77709 Oberwolfach-Walke

Meetings 2001

Participants of the meetings are invited personally by the director of the institute. The participation is subject to such an invitation. Interested researchers, in particular young mathematicians, can contact the administration of the institute. Since the number of participants is restricted not all enquiries can be considered.

Information is also available on our web site `http://www.mfo.de`.

January 7 – 13, 2001
Finite Fields: Theory and Applications
Leitung: Joachim von zur Gathen, Paderborn; Igor E. Shparlinski, NSW

January 14 – 20, 2001
Combinatorial Convexity and Algebraic Geometry
Leitung: Victor V. Batyrev, Tübingen; Peter McMullen, London; Tadao Oda, Sendai; Bernard Teissier, Paris

January 21 – 27, 2001
Berechenbarkeitstheorie
Leitung: Klaus Ambos-Spies, Heidelberg; Steffen Lempp, Madison; Ted Slaman, Berkeley

January 28 – February 3, 2001
Topologische Methoden in der Gruppentheorie
Leitung: Herbert Abels, Bielefeld; Peter H. Kropholler, London; Karen Vogtmann, Ithaca

February 4 – 10, 2001
Mixed Finite Element Methods and Applications
Leitung: Douglas N. Arnold, University Park; Carsten Carstensen, Kiel; Ronald H.W. Hoppe, Augsburg

February 11 – 17, 2001
Funktionentheorie
Leitung: Kari Astala, Jyväskylä; Walter Bergweiler, Kiel; Reiner Kühnau, Halle

February 18 – 24, 2001
Geometric Rigidity and Hyperbolic Dynamics
Leitung: Werner Ballmann, Bonn; Anatole B. Katok, University Park; Gerhard Knieper, Bochum

March 4 – 10, 2001
Algebraische Gruppen
Leitung: Michel Brion, Grenoble; Jens Carsten Jantzen, Aarhus; Peter Slodowy, Hamburg

March 11 – 17, 2001
Stochastics in the Sciences
Leitung: Anton Bovier, Berlin; Richard D. Gill, Utrecht; Willem R. van Zwet, Leiden

March 18 – 24, 2001
Gewöhnliche Differentialgleichungen
Leitung: Jean Mawhin, Louvain-la-Neuve; Klaus Schmitt, Salt Lake City; Hans-Otto Walther, Gießen; N.N.

March 25 – 31, 2001
Representations of Finite Groups
Leitung: Michel Broue, Paris; Richard Dipper, Stuttgart; Burkhard Külshammer, Jena; Geoffrey R. Robinson, Birmingham

April 1 – 7, 2001
Arbeitsgemeinschaft mit aktuellem Thema (wird in Heft 1/2001 der DMV–Mitteilungen bekanntgegeben)
Leitung: N.N.

April 8 – 14, 2001
Numerical Methods for Singular Perturbation Problems
Leitung: Pieter W. Hemker, Amsterdam; Hans-Görg Roos, Dresden; Martin Stynes, Cork

April 15 – 21, 2001
Asymptotic and Numerical Methods for Kinetic Equations
Leitung: Pierre Degond, Toulouse; Axel Klar, Darmstadt; Reinhard Illner, Victoria

April 22 – 28, 2001
Konvexgeometrie
Leitung: Paul R. Goddey, Norman; Peter M. Gruber, Wien

April 29 – May 5, 2001
Phasenübergänge
Leitung: Hans Wilhelm Alt, Bonn; Stephan Luckhaus, Leipzig; Errico Presutti, Roma; Ekhard K.H. Salje, Cambridge

May 6 – 12, 2001
Aperiodic Order
Leitung: Michael Baake, Tübingen; Jean Bellissard, Toulouse; Robert V. Moody, Edmonton

May 13 – 19, 2001
Schrödinger Operators
Leitung: Volker Enß, Aachen; Christian Gerard, Palaiseau

May 20 – 26, 2001
Nonlinear Evolution Problems
Leitung: Michael Struwe, Zürich; Sergiu Klainerman, Princeton

May 27 – June 2, 2001
Schnelle Löser für partielle Differentialgleichungen
Leitung: Randolph E. Bank, San Diego; Wolfgang Hackbusch, Leipzig; Gabriel Wittum, Heidelberg

June 3 – 9, 2001
Oberwolfach–Seminar
Leitung: N.N.

June 3 – 9, 2001
Oberwolfach–Seminar
Leitung: N.N.

June 10 – 16, 2001
Differentialgeometrie im Großen
Leitunge: Werner Ballmann, Bonn; Jean-Pierre Bourguignon, Bures-sur-Yvette; Wolfgang Ziller, Philadelphia

June 17 – 23, 2001
Numerik von Mikrostrukturen
Leitung: Carsten Carstensen, Kiel; Wolfgang Hackbusch, Leipzig; Thomas Y. Hou, Pasadena

June 17 – 23, 2001
Two Hundred Years of Number Theory after Carl-Friedrich Gauß's Disquisitiones Arithmeticae
Leitung: Catherine Goldstein, Paris; Norbert Schappacher, Strasbourg; Joachim Schwermer, Düsseldorf

June 24 – 30, 2001
Algebraische Zahlentheorie
Leitung: Christopher Deninger, Münster; Peter Schneider, Münster; Anthony J. Scholl, Durham

July 1 – 7, 2001
4–dimensional Manifolds
Leitung: Stefan Alois Bauer, Bielefeld; Peter B. Kronheimer, Harvard; Ronald J. Stern, Irvine

July 8 – 14, 2001
Vision and Related Subjects
Leitung: Jean-Michel Morel, Paris; Christoph von der Malsburg, Bochum/LA; David Mumford, Providence

July 15 – 21, 2001
Dynamische Systeme
Leitung: Helmut W. Hofer, New York; Jean-Christophe Yoccoz, Orsay; Eduard Zehnder, Zürich

July 22 – 28, 2001
Explicit Methods in Number Theory
Leitung: Henri Cohen, Talence; Hendrik W. Lenstra Jr., Berkeley/Leiden; Don B. Zagier, Bonn/Utrecht

July 29 – August 4, 2001
Computational Group Theory
Leitung: Gerhard Hiß, Aachen; Derek F. Holt, Warwick; Michael F. Newman, Canberra, Herbert Pahlings, Aachen

August 5 – 11, 2001
Partial Differential Equations
Leitung: L. Craig Evans, Berkeley; Ernst Kuwert, Freiburg; Stefan Müller, Leipzig

August 12 – 18, 2001
Relativistic Quantum Systems and Quantum Electrodynamics
Leitung: Volker Bach, Mainz; Heinz Siedentop, Regensburg; Jan Philip Solovej, Copenhagen

August 26 – September 1, 2001
Complex Geometry: Interactions between Algebraic, Differential, and Symplectic Geometry
Leitung: Arnaud Beauville, Paris; Fabrizio Catanese, Göttingen; Eduard J.N. Looijenga, Utrecht; Christian Okonek, Zürich

September 2 – 8, 2001
Singularitäten
Leitung: Gert-Martin Greuel, Kaiserslautern; Joseph H.M. Steenbrink, Nijmegen; Victor A. Vassiliev, Moscow

September 9 – 15, 2001
Topologie
Leitung: Wolfgang Lück, Münster; Cameron M. Gordon, Austin; Robert Oliver, Villetaneuse

September 16 – 22, 2001
Theory of the Riemann Zeta and Allied Functions
Leitung: Martin N. Huxley, Cardiff; Matti Jutila, Turku; Yoichi Motohashi, Tokyo

September 23 – 29, 2001
Combinatorics, Probability and Computing
Leitung: Bela Bollobas, Memphis; Ingo Wegener, Dortmund

September 30 – October 6, 2001
Stochastic Evolution Equations and Applications
Leitung: Giuseppe Da Prato, Pisa; Michael Röckner, Bielefeld; J. Zabczyk, Warszawa

October 7 – 13, 2001
Arbeitsgemeinschaft mit aktuellem Thema (wird in Heft 3/2001 der DMV–Mitteilungen bekanntgegeben)
Leitung: N.N.

October 14 – 20, 2001
Oberwolfach–Seminar
Leitung: N.N.

October 14 – 20, 2001
Oberwolfach–Seminar
Leitung: N.N.

October 21 – 27, 2001
Theoretische und Mathematische Biologie
Leitung: Andreas Dress, Bielefeld; N.N.

October 28 – November 3, 2001
Stable Laws, Processes, and Applications
Leitung: Werner Linde, Jena; Jan Rosinski, Knoxville; Gennady Samarodnitsky, Ithaca

November 11 – 17, 2001
Oberwolfach–Seminar
Leitung: N.N.

November 11 – 17, 2001
Oberwolfach–Seminar
Leitung: N.N.

November 18 – 24, 2001
Numerical Integration and its Complexity
Leitung: Harald Niederreiter, Wien; Knut Petras, Braunschweig; Henryk Wozniakowski, Warszawa/New York

November 25 – December 1, 2001
Modellierung, Simulation und Optimierung integrierter Schaltkreise
Leitung: Kurt Antreich, München; Roland Bulirsch, München; Albert Gilg, München/Perlach; Peter Rentrop, Karlsruhe

December 2 – 8, 2001
Finite Geometries
Leitung: Aart Blokhuis, Eindhoven; James W.P. Hirschfeld, Sussex; Dieter Jungnickel, Augsburg; Joseph A. Thas, Gent

December 9 – 15, 2001
C^*–Algebren
Leitung: Dietmar H. Bisch, Santa Barbara; Eberhard Kirchberg, Berlin; Georges S. Skandalis, Paris

December 16 – 22, 2001
Mathematical Methods in Manufacturing and Logistics
Leitung: Rainer E. Burkhard, Graz; Horst W. Hamacher, Kaiserslautern; Hartmut Noltemeier, Würzburg

DMV–Seminare 2000

Das Mathematische Forschungsinstitut Oberwolfach veranstaltet in Zusammenarbeit mit der Deutschen Mathematiker-Vereinigung vor allem für jüngere Mathematiker (mit abgeschlossener oder fortgeschrittener Hochschulausbildung) Fortbildungsseminare aus dem Bereich der Mathematik einschließlich von Rand- und Anwendungsgebieten. Einerseits sollen junge Mathematiker in ihrem eigenen Arbeitsbereich weiterführende Erfahrungen sammeln und Kontakte mit Fachleuten herstellen. Andererseits sollen die Seminare aber auch Gelegenheit bieten, Methoden und Ergebnisse fremder Arbeitsgebiete kennenzulernen mit dem Ziel, den mathematischen Horizont zu erweitern und sich vielleicht auch ein weiteres Arbeitsfeld zu erschließen.

Die Teilnehmer erhalten einen Zuschuß zu den Aufenthaltskosten. Alle Seminare finden im Mathematischen Forschungsinstitut Oberwolfach statt. Die Zahl der Teilnehmer ist auf jeweils 25 begrenzt.

Interessenten erhalten auf Anfrage weiteres Informationsmaterial. Bitte beachten Sie hierzu auch unseren WWW Server (`http://www.mfo.de`). Die Anmeldung zu einem Seminar sollte möglichst frühzeitig erfolgen bei:

Prof. Dr. Matthias Kreck
Universität Heidelberg
Mathematisches Institut
Im Neuenheimer Feld 288
D-69120 Heidelberg

Bitte fügen Sie der Anmeldung eine kurze Schilderung Ihres Werdeganges, Ihres Arbeitsgebietes und Ihrer derzeitigen Tätigkeit bei.

- **Quantum Cohomology**

  June 11 – 17, 2000; Deadline for Application: May 1, 2000

  Organizers: Bernd Siebert (Bochum), Gan Tian (MIT)

  Subjects: The cohomology ring of a closed, oriented manifold is an important classical topological invariant. Inspired by quantum field theory, it has been realized only recently that for projective algebraic or closed symplectic manifolds the set of quantum cohomology ring. Applications are to so diverse fields as symplectic topology, mirror symmetry, the theory of integrable systems, and enumerative algebraic geometry. The seminar will both address definition and properties of the new invariants involving (pseudo-)holomorphic curves (Gromov–Witten invariants), as well as the study of the refined structure on cohomology via algebra and the theory of integrable systems. Some applications will be also given.

  Prerequisites: Basic knowledge in manifold theory (differential forms, homology, fundamental group), and in algebraic geometry.

- **Nonparametric Function Estimation, Neural Nets and Risk Asymptotics**

  June 11 – 17, 2000; Deadline for Application: May 1, 2000

  Organizers: Andrew Barron (Yale), Laszlo Gyrofi (Budapest), Michael Nussbaum (Cornell)

  Subjects: This course provides a study of the foundations of nonparametric function estimation as well as some of the latest techniques to give useful bounds and asymptotics of the statistical risk. We begin with basic principles of estimation of density functions, regression, and pattern recognition covering methods of smoothing (histograms, local averaging) and empirical error minimization (least squares over classes of functions, neural sets). Empirical processes and in particular likelihood processes will play a special role in the analysis. On one hand we will study the convergence of experiments and their asymptotic equivalence. This enables us to examine a Gaussian white noise model as an idealization of density and regression problems and to deduce asymptoics of the risk for function estimation problems from its counterpart in the Gaussian model. On the other hand we will present probability tail and expectation bounds on empirical processes that yield bounds on the risk of estimates in terms of the complexity of the class of functions.

Prerequisites: Open to any graduate student who had at least one course each in mathematical statistics and probability.

- **The Riemann Zeta Function and Random Matrix Theory**

  October 15 – 21, 2000; Deadline for Application: September 1, 2000

  Referenten: Jon Keating (Bristol), Zeev Rudnick (Tel Aviv), Kannan Soundararajan (Princeton)

  Subjects: The Riemann zeta function and its generalizations are among the most useful tools in Number Theory. Random Matrix Theory is a theory of the local statistics of the eigenvalues of certain ensembles of random matrices, such as the group of all N-by-N unitary matrices, in the "scaling limit" as the size of the matrices goes to infinity. It has been developed and used to model various phenomena in mathematical physics. An exciting and relatively recent development in the theory of zeta function is the realization that the imaginary parts of the zeros, when viewed on the scale of their mean separation, seem to have non-trivial statistics which are precisely those appearing in Random Matric Theory. The goal of this seminar is to explain what is known on the relation between zeros of the Riemann zeta function and RMT. We will give tutorials on the basics of RMT, the basic theory of the Riemann zeta function and related objects (such as Dirichlet L-functions) and their applications in number theory, and the stateof the art in understanding the connections between these two theories.

  Prerequisites: The prospective audience are students working in either number theory or mathematical physics. They should know the basics of complex function theory and of the Fourier transform.

- **Motion by Curvature**

  October 15 – 21, 2000; Deadline for Application: September 1, 2000

  Referenten: Gerhard Huisken (Tübingen), Tom Ilmanen (ETH-Zürich)

  Subjects: The past twenty years have seen great strides in understanding the motion of submanifolds by their curvature, including the identification of key quantities, the structure of singularities, the definition of weak solutions, and the relation to geometric inequalities. The techniques developed in the course have broad applications in a wide variety of geometric flows. Topics will include: 1. Classical evolution by curvature and 2. Inverse mean curvature flow and the Penrose inequality in General Relativity.

  Prerequisites: Basic notions of partial differential equations (especially elliptic and parabolic) and differential geometry.

- **Computationl Mathematics in Chemical Engineering and Biotechnolgy**

  November 12 – 18, 2000; Deadline for Application: October 1, 2000

  Referenten: Peter Deuflhard (Berlin), Rupert Klein (Potsdam/Berlin), Christof Schütte (Berlin)

Subjects: Chemical engineering and biotechnology problems cover a wide range of time and space scales to be attacked by a wide range of computational methods. Chaotic molecular motion requires Markov chain and dynamical systems theory and algorithms. Chemical reaction networks lead to stiff systems of ordinary differential equations to be solved by specialized numerical integrators. Large systems require subtle mathematical dimension reduction techniques including discrete Galerkin methods for millions of equations in polymer industry. Nonlinear partial differential equations (PDEs) of reaction-diffusion type dominate in chemical engineering to be tackled by time and space adaptive multilevel methods. Beyond reaction-diffusion, hyperbolic or mixed hyperbolic-elliptic PDEs require distinct appropriate discretizations. Rather recent algorithmic approaches together with industrial problems will be presented.

Prerequisites: Some familiarity with ordinary and partial differential equations, numerical analysis; useful: linear functional analysis, dynamical systems, singular perturbation theory, elementary knowledge in chemistry.

- **Characteristic Classes of Connections, Riemann-Roch Theorems, Analogies with epsilon-factors**

November 12 – 18, 2000; Deadline for Application: October 1, 2000

Referenten: Spencer Bloch (Chicago), Helene Esnault (Essen)

Subjects: The subject of index theorems for linear differential equations is classical. With the modern interest in D-modules on moduli spaces, it has seemed of interest to try to develop a "families index theorem" for D-modules in an algebraic setting. Among the interesting facets of this question is the close analogy between irregular singular points for linear differential operators and wild ramification for l-adic sheaves in characteristic p. The subject is in its infancy and we do not want to promise too much. Among the topics to be considered are: 1. Characteristic classes. AD classes, relative AD classes. Relations with Gauss-Manin, Hitchin style connections, and Chern-Simons classes. 2. Riemann-Roch theorem for connections. 3. Irregular singular points, determinant of Gauss-Manin. 4. Relations with Epsilon factors. Periods for irregular singular points.

Prerequisites: Basic theory of connections, e.g. Deligne, SLN 163: equations diffèentielles à points singuliers réguliers, Malgrange Polynomial DO's. (Birkhäuser, Progr. Maths., 96), Riemann-Roch theorems (Fulton, Malgrange, Laumon), our articles.

Verschiedene Tagungen

March 6 – 8, 2000

International Conference on Research Trends in Science and Technology, RTST 2000, Beirut and Byblos, Lebanon

Purpose: This conference is a forum for scientists and engineers to present their research, ideas, developments and applications in basic sciences and engineering.

Topics: Chemical Synthesis – Molecular Recognition – Quantum Mechanics – Material Science – Optimization – Modeling and Simulation – Signal and Image Processing – Smart Engineering – Applied Symbolic Programming – Numerical Methods

Keynote Speakers: P. Ajayan (Rensselaer Polytechnic Institute, USA), D. Brewer (U of Arkansas, USA), G. Newkome (U of South Florida, USA), J. Sorem (U of Tulsa, USA), F. Wazzan (U of California – LA, USA), and other prominent researchers

Organizing Committee: A. Kabbani (Chair), R. Ghajar (Co-Chair), I. Moghrabi (Secretary), M. Hamdan, A.N. Kassar, M. Tabbara

Info: Dr. Issam Moghrabi, Natural Science Division, Lebanese American University, P.O.Box 13-5053, Beirut, Lebanon, E-mail: imoghrbi@lau.edu.lb,
Internet: `http://www.lau.edu.lb`

March 6 – 10, 2000

International Conference on Differential Geometry and Quantum Physics, Berlin, Germany

This International Conference on "Differential Geometry and Quantum Physics" is organized and funded by Sonderforschungsbereich (SFB) 288 "Differential Geometry and Quantum Physics" of Deutsche Forschungsgemeinschaft, which links the mathematics departments of Humboldt Universität zu Berlin, Technische Universität Berlin, the Universität Potsdam, and the physics department of Freie Universität Berlin.

Scientific Topics: The scientific scope of the conference reflects a good part of the research activities in SFB 288. It is centered around the interests of Dirk Ferus, Ruedi Seiler, and Robert Schrader, to honour their contribution to the SFB and to science in general, on the occasion of their sixtieth birthdays – which happen to take place in a relatively small neighbourhood of the conference date.

The topics of the conference include

- Differential Geometry and Geometric Analysis
  - Submanifolds,
  - Integrable Systems,
  - Spectral Geometry;
- Partial Diffential Equations in Mathematical Physics
  - Dirac and Schrödinger Equations,
  - Transport Equations,
  - Soliton Equations,
  - Microlocal Analysis,
  - Spectral Theory;

- Quantum Mechanics and Quantum Field Theory
  - Semiclassical, Adiabatic, Perturbative and Born-Oppenheimer Approximations,
  - N-Body and Many-Body Quantum Theory,
  - Algebraic Quantum Field Theory;

Aside from plenary talks, special sections on the above mentioned topics will be organized. We invite applications for these.

Confirmed Speakers: The following scientists have agreed to give a talk at the conference:

J. Avron, W. Ballmann, J. Bourguignon, J. Cheeger, J.-M. Combes, L. Faddeev, J. Fröhlich, A. Jaffe, E. Lieb, W. Müller, S. Novikov, B. Simon, C.-L. Terng

Info: Volker Bach, FB Mathematik (17), Universität Mainz, D-55099 Mainz, Germany,
E-mail: vbach@mathematik.uni-mainz.de,
Internet: `http://www-sfb288.math.tu-berlin.de/conference/`

March 14 – 15, 2000

Kolloquium: Prozessnahe Messtechnik und Modellierung mehrphasiger Systeme, Hamburg, Deutschland

Themen:

- Wirbelschichtreaktoren
- Bioreaktoren
- Messprinzipien
- Messysteme

Veranstalter: Sonderforschungsbereich 238 der Deutschen Forschungsgemeinschaft (DFG) an der Technischen Universität Hamburg–Harburg

Sprecher: Prof. Dr.-Ing. J. Werther

Stellv. Sprecher: Dr.-Ing. H. Märkl

Info: TUHH–Technologie GmbH, Frau Gerlinde Lübkens, Schellerdamm 4, D-21079 Hamburg, Germany,
Tel.: +49-(0)40-76618012, Fax: +49-(0)40-76618018, E-mail: loebkens@tutech.de,
Internet: `http://www.tutech.de`

March 27 – 31, 2000

Conference on High Performance Scientific Computing, Hanoi, Vietnam

High Performance Scientific Computing (HPSC) is an interdisciplinary area that combines many fields such as mathematics, computer science and scientific and engineering applications. It is a key high-technology for competitiveness in industrialized countries as well as for speeding up development in emerging countries.

HPSC develops methods for computer aided simulation and optimization for systems and processes. In practical applications in industry and commerce, science and engineering, it helps to save resources, to avoid pollution, to reduce risks and costs, to improve product quality, to shorten development times or simply to operate systems better.

High performance in HPSC can mean highly efficient algorithms and software as well as high computing power of the hardware, e.g. parallel systems.

Topics: include, but are not limited to...

- mathematical modelling
- numerical simulation
- methods for optimization and control
- parallel architectures
- parallel programming
- symbolic computing
- software development
- applications of Scientific Computing in environmental and hydrology problems physics, mechanics and chemistry transport, logistics and site location communication networks, production scheduling energy management, investment strategies industrial and commercial problems

Steering Committee: H.G. Bock (Chair, Heidelberg), H.X. Phu (Hanoi), N. T. Son (Ho Chi Minh City)

Scientific Committee: P.K. Anh (Hanoi), U. Ascher (Vancouver), C. Basaruddin (Jakarta), D. Dung (Hanoi), G. Feichtinger (Wien), T.Q. Hoa (Hanoi), K.-H. Hoffmann (Bonn), D.V. Hung (Macau), W. Jäger (Heidelberg), R. Longman (New York), Y. Paker (London), H.X. Phu (Chair, Hanoi), J. Schlöder (Heidelberg), N.T. Son (Co-chair, Ho Chi Minh City), M. Thera (Limoges), G. Frhr. zu Putlitz (Ladenburg)

Info: Dr. Ta Duy Phuong, Institute of Mathematics, P.O.Box 631 Bo Ho, Hanoi, Vietnam, Fax: +84-4-7564303, E-mail: scicom@thevinh.ac.vn,
Internet: `http://www.iwr.uni-heidelberg.de/HPSCHanoi2000`
`http://www.hcmut.edu.vn/dit/HPSCHanoi2000`

April 14 – 15, 2000

SCAM 2000: Conference in Applied Mathematics for undergraduate and graduate students, Slovak University of Technology, Bratislava, Slovak Republic

Scope: The aim of the Conference is to give an opportunity to undergraduate and graduate students to present their results in Applied Mathematics.

Programme Committee: I. Bock, O. Grosek, M. Komornikova, R. Mesiar, Z. Riecanova, L. Satko, J. Siran, M. Zajac

Local Organizers: M. Simovcova, E. Pastuchova, H. Lichardova, G. Jenca, T. Bognar, P. Vicenik, S. Horvathova

Info: KM FEI STU (SCAM), Ilkovicova 3, 812 19 Bratislava, Slovakia,
E-mail: scam@kmat.elf.stuba.sk,
Internet: `http://www.jsmf.sk/`

May 29 – 31, 2000

Third International Conference on Mechanics and Materials in Design, M2D '2000, formerly known as 'Mechanics in Design' Orlando, Florida, USA

M2D is the third international gathering of scientists and engineers interested in the fields of engineering mechanics, design and materials engineering. The first conference was held in Toronto in 1996 and attracted over 200 delegates. The second was organised

by Prof. B. Hull and R. Gentle in Nottingham in 1998. These meetings resulted from the belief that of those disciplines associated with advanced product design and manufacture, engineering mechanics and materials engineering have made the most significant advance in recent years. Important and dramatic improvements in component design can be made by the use of the latest advances in mechanics and materials.

The purpose of this Third International Conference on "Mechanics and Materials in Design" is to bring together scientists and engineers from the mechanics and materials communities to present their latest results and discuss new advances over a broad range of topics dealing with analytical, numerical and experimental techniques in mechanics and advances in materials' technology.

The main topics of interest are: Finite Element, Boundary Element, Hybrid and Meshless Methods – Structural Stability – Nonlinear Mechanics – Material Forming and Cutting – Dynamics of Structures – Contact Mechanics – Damage and Fracture – Probabilistic Methods – Reliability Assessment – Error Estimation and Adaptivity.

International Scientific Committee: M. Andritschky (Portugal), S. Datta (USA), G. D'Errico (Italy), L.A. Dobrzanski (Poland), D. Dunlap (USA), M. Elbestawi (Canada), H. Fujii (Japan), H. Funk (Germany), N. Ghoniem (USA), J. Goldak (Canada), J.B. Hull (UK), N. Jones (UK), A. Kalamkarov (Canada), L.M. King (Singapore), V.K. Kinra (USA), H.W. Klein (Germany), D. Krajcinovic (USA), K. Laermann (Germany), M. Langseth (Norway), K.M. Liew (Singapore), A. Mal (USA), S.A. Meguid (Canada), G. Mimmi (Italy), E.V. Morozov (South Africa), J.N. Reddy (USA), S.R. Reid (UK), C. Ruiz (UK), J.F. Silva Gomes (Portugal), P. Stanley (UK)

Info: Prof. Shaker A. Meguid (Conference Chair), Department of Mechanical and Industrial Engineering, University of Toronto, 5 King's College Road, Toronto, Ontario M5S 3G8, Canada, Tel.: +1-416-978-5741, Fax: +1-416-978-7753,
E-mail: meguid@mie.utoronto.ca,
Internet: `http://www.mie.utoronto.ca/labs/emdl/orlando2000/`

June 7 – 11, 2000

PhD Euroconference on Complex Analysis and Holomorphic Dynamics, CAD 2000, Platja d'Aro, Costa Brava, Spain

Complex analysis and holomorphic dynamics are classical domains of the mathematical sciences which go now through an exciting phase of fruitful interplay. The PhD Euroconference is intended to bring together young researchers in order to expose and discuss work in progress and recent advances on these fields.

Scientific Committee: J. Ortega-Cerdà (Barcelona, Spain), R. Perez-Marco (UCLA, USA & Paris Sud, France), S. Rhode (Seattle, USA)

Main Speakers: Xavier Buff (Toulouse, France), Gregery Buzzard (Cornell, USA), Mattias Jonsson (Michigan, USA), Ricardo Perez Marco (UCLA, USA & Paris Sud, France), Steffen Rohde (Seattle, USA)

Info: Centre de Recerca Matemàtica, Institut d'Estudis Catalans, Apartat 50, E-08193 Bellaterra, Spain; Tel.: +34-93-581-1081, Fax: +34-93-581-2202,
E-mail: crm@crm.es,
Internet: `http://crm.es/cad2000`

June 12 – 17, 2000

Third International Conference on "Differential Equations and Applications", DIFFEQ '2000, Saint-Petersburg, Russia

Focus: Discussion of latest advances in the development of the theory of ordinary differential equations and the role of the theory for explanation of some nonlinear effects arising in real systems as well as demonstration of up-to-date efficient methods for solution of applied technical problems, Symposium "Discrete Methods in Mechanics and Mechanical Engineering".

Topics: The list of possible topics includes – but is not limited to – the following:

- qualitative theory of ordinary differential equations;
- dynamical systems;
- constructive methods and computer-oriented algorithms;
- computer modeling in dynamical systems;
- discrete methods in mechanics and mechanical engineering;
- mathematical models in biology, medicine, ecology, etc.;
- applications to physics, electrotechnics, and electronics;
- dynamic economic models;
- numerical methods

Scientific Committee:
The editorial board of the Electronic Journal "Differential Equations and Control Processes": A.A. Bolobruh, N.N. Krasovsky, A.B. Kurzhansky, S.K. Korovin, V.A. Pliss, V.A. Yakubovich, V.I. Zubov, Yu.N. Bibikov, G.A. Leonov, L.A. Mironovsky, V.A. Palmov, L.A. Petrosyan, S.Yu. Pilyugin, V.B. Smirnova, V.F. Zaitsev
and E. Escultura (Philippines), E. Malenovsky (Czech Republic), M. Mrozek (Poland), G. Ostermeyer (Germany), S. Psakhie (Russia), A. Reinfelds (Latvia), S. Salerno (Italy), M. Schanz (Germany), N. Shabrov (Russia), V. Gaiko (Belarus).

Organizing Committee: E. Ershov (Russia), A. Moiseev (Russia)

Info: Alex Moiseev, DIFFEQ '2000 Meeting Secretariat, Department of Mathematics, State Technical University, Polytechnicheskaya st. 29, St. Petersburg 195251, Russia, Tel.: +7-812-534-3314, Fax: +7-812-534-1404,
E-mail: diff2000@osipenko.stu.neva.ru

June 27 – July 1, 2000

Conference on Finite Element Methods for Three–dimensional Problems, FEM3D, University of Jyväskylä, Finland

The finite element method is one of the most effective numerical methods for solving various problems arsising from mathematical physics and engineering. The aim of the conference is to bring together specialists who work on finite element solutions of three–dimensional problems, since this is now a very active area. The topics of the conference include generation of three–dimensional unstructured meshes, local and adaptive mesh refinement, Delaunay triangulations, three–dimensional curved and mortar elements, shell elements, domain decomposition and multigrid methods, a priori and a posteriori error estimates, reliable solutions, superconvergence phenomena, direct and iterative solvers,

nonlinear and singularly perturbed problems, optimal shape design, graphics for three–dimensional finite elements, etc. A special emphasis will be laid on real–life industrial applications.

Scientific Committee: J. Brandts (The Netherlands), Z. Dostal (Czech Republic), D. Hömberg (Germany), Y.Q. Huang (China), Yu.A. Kuznetsov (USA), Q. Lin (China), H.-G. Roos (Germany), K. Segeth (Czech Republic), R. Stenberg (Finland), M. Stynes (Ireland), T. Tiihonen (Finland), A. Zhou (China)

Organizing Committee: P. Neittaanmäki (Chairman), M. Krizek (Czech Republic), L. Liu (Canada), S. Korotov (Finland)

Info: FEM3D Conference Secretariat, Laboratory of Scientific Computing, University of Jyväskylä, P.O.Box 35, FIN-40351 Jyväskylä, Finland,
Tel.: +358-14-260-2780, Fax: +358-14-260-2731, E-mail: fem3@mit.jyu.fi,
Internet: `http://www.mit.jyu.fi/tapahtumia/fem3/`

July 10 – 14, 2000

2000 SIAM Annual Meeting, Rio Grande, Puerto Rico

SIAM and the Organizing Committee for the meeting are proud to announce that the following scientists and mathematicians (partial list) have accepted the invitations to give plenary presentations on the following subjects:

- *Algebraic Methods for Model Reduction*
  Paul M. Van Dooren, Université Catholique de Louvain, Belgium
- *Computational Astrophysics*
  Paul R. Woodward, University of Minnesota, Minneapolis
- *Dynamical Systems*
  Nancy J. Kopell, Boston University
- *Imaging*
  Jean-Michel Morel, Ecole Normale Supérieure de Cachan, France
- *Multiscale Algorithms*
  Randolph E. Bank, University of California, San Diego
  Ronald A. DeVore, University of South Carolina, Columbia
  Vladimir Rokhlin, Yale University
- *Nonlinear PDE/Applied Analysis*
  Michael Crandall, University of California, Santa Barbara
- *Interior-point Methods and Semi-definite Programming*
  Yin Zhang, Rice University

Meeting Themes: The major themes include, but are not limited to:

- Algebraic Methods for Model Reduction
- Computational Astrophysics
- Computational Biology
- Dynamical Systems
- Imaging
- Information Technology/Communication

- Material Science/Nanotechnology
- Multiscale Algorithms
- Nonlinear PDE/Applied Analysis
- Optimization/Interior Point Methods

Organizing Committee: T.F. Chan (Co-Chair, U of California, Los Angeles), R.A. Tapia (Co-Chair, Rice U), M. Cheney (Rensselaer Polytechnic Inst.), Shui-Nee Chow (Georgia Inst. of Technology), R. Coifman (Yale U), W.M. Coughran Jr. (Bell Lab., Lucent Technologies), B. Engquist (U of California, LA), C.A. Greengard (IBM T.J. Watson Res. Center), B.L. Keyfitz (U of Houston and Brown U), J. Meza (Sandia National Lab., Livermore), P. Tarazaga (U of Puerto Rico, Mayaguez), M.F. Wheeler (U of Texas, Austin)

Info: SIAM, Society for Industrial and Applied Mathematics, 3600 University City Science Center, Philadelphia, PA 19104-9889, USA,
Tel.: +1-215-382-9800, Fax: +1-215-386-7999, E-mail: meetings@siam.org,
Internet: `http://www.siam.org/meetings/an00/`

July 13 – 15, 2000

Conference on Applications of Physics in Financial Analysis, Liege, Belgium

The scope of statistical physics has broadened considerably over the last few decades. Some of its concepts and methods scaling, fractal phenomena, and self-organisation, for example have penetrated a number of fields beyond the boundaries of physics. In particular, problems in economics and finance have attracted the interest of research groups all over the world.

The main topics studied in applications of physics in financial analysis arise from the success of non-linear physical models and the following mathematical techniques developed to predict fluctuations: the detrended fluctuational analysis (used by biologists in the sorting, coding and decoding of DNA sequences, and by meteorologists for predicting the formation and breaking of clouds), and the self-organised criticality models developed to describe avalanches, etc.

The purpose of this second European meeting is to bring together researchers and practitioners interested in non-linear dynamical systems and their applications. There will be presentations by physicists and economists of state-of-the-art methods and recent findings. This meeting is intended for both industrial and academic participants seeking new ways to measure, to model and to predict financial events.

Subjects of interest are among others market modelling and predictions, risk management, agent-based modelling, hedging in incomplete markets, bench marking and performance measurements, foreign exchange markets, time series empirical analysis and predictability, efficient market hypotheses, non-equilibrium or equilibrium market conditions, economic or financial networks and clusters, growth and bankruptcy, theoretical and practical aspects of new indices.

Invited Speakers: Z.-X. Cai (Deutsche Bank New York), Th. Lux (U of Bonn), G. Rodgers (Brunel U London), S. Solomon (Hebrew U), D. Stauffer (U of Cologne), A. Nagurney (U of Massachusetts), H. Takayasu (Sony Corp. Tokyo), V.I. Yukalov (Dubna)

Scientific Organizers: Preben Alstrøm (Denmark), Marcel Ausloos (Belgium), Jean-

Philippe Bouchard (France), Doyne Farmer (USA), János Kertész (Hungary), Konstantin Klemm (Denmark), Rosario Mantegna (Italy)

Info: Marcel Ausloos, GRASP, Physics Institute B5, Université de Liège SUPRAS, B-4000 Liege, Belgium, E-mail: klemm@nbi.dk,
Internet: `http.//www.eps.org/apfa`

July 19 – 26, 2000

The Third World Congress of Nonlinear Analysts, WCNA-2000, Catania, Sicily, Italy

Scope: The increasing compartamentalization and concomitant specialization of knowledge that was the trend of the present century is undergoing subtle changes. The age of living in the increased estrangement between disciplines in the arts and sciences is slowly waning. The ideal of productivity and deeply working in two or three disciplines which are not contiguous in the current geography of thought, such as math and anthropology, political science and music, chemistry and philosophy is seen as within the realm of possibility. The idea that we should, of course, continue to value academic specialization but must also work for integration of knowledge and the reestablishment of truly liberal learning as the coherent intellectual core of academic institutions, is rapidly gaining ground. The aim of the Congress is to promote "Unity through diversity". What a perfect way in which to start the new millenium.

Keynote or expository addresses: A.V. Balakrishnan (USA), J. Bona (USA), H. Brezis (France), F. Clarke (Canada/France), I. Ekeland (France), I. Giaever (USA) (Nobel Laureatte), D. Greenspan (USA), K.P. Hadeler (Germany), K.-H. Hoffmann (Germany), P. Kokotavic (USA), J. Mawhin (Belgium), A. Miele (USA), J. Nash Jr. (USA) (Nobel Laureatte), J. Necas (Czech Republic), P.V. Raviart (France), J. Serrin (USA), R. Temam (France), E. Zeidler (Germany)

Info: WCNA-2000, Florida Institute of Technology, Department of Mathematical Sciences, Melbourne, FL 32901, USA,
Tel. +1-407-674-7412, E-mail: dkermani@winnie.fit.edu,
Internet: `http://kermani.math.fit.edu/wcna2000/second.html`

July 23 – 31, 2000

Logic Colloquium 2000, ASL European Summer Meeting, La Sorbonne, Paris, France

Mathematical logic was born, as an organized discipline, around the beginning of the present century. Not always well received by mathematicians, it was sometimes the source of acrimonious discussions. However, it is clear, today, that some of its results range high amongst the achievements of science in the 20^{th} Century. Its lively development has nourished the work of mathematicians, computer scientists, philosophers, linguists and other scientists.

For many years the annual European Summer Meetings of the Associations for Symbolic Logic (ASL) has been the place where distinguished specialists have reported on the discipline's state of the art and its contributions to other areas of knowledge.

Sections: The meeting will cover the following areas:

- Proof theory and logical foundations of Computer Science;
- Set theory;
- Model theory;
- Computability and Complexity;
- History of logic in the 20^{th} Century;
- Philosophy and logic applied to cognitive sciences.

Program Committee: D. Andler (CREA-Paris 10), Ch. Betline (CNRS-Paris 7), B. Cooper (Leeds), A. Kanamori (Boston), Ch. Parsons (Harvard), A. Razborov (Steklov, Moscow), H. Schwichtenberg (Munich), J. Steel (Berkeley), S. Todorcevic (CNRS-Paris7), D. van Dalen (Utrecht), A. Wilkie (Oxford), C. Wood (Chair, Wesleyan U).

Info: LC 2000, Équipe de Logique Mathématique, case 7012, Université Paris 7 – Denis Diderot, 2 place Jussieu, F-75251 Paris Cedex 05, France,
E-mail: lc2000@logique.jussieu.fr,
Internet: `http://lc2000.logique.jussieu.fr`

July 31 – August 4, 2000

The Fourth Summer Conference on Numerical Modelling in Continuum Mechanics: Theory, Algorithms, Applications, Prague, Czech Republic

Topics: Fluid Dynamics – Structural Mechanics – Material, Structures and Optimization – Environmental Problems

Program Committee: D. Braess, L. Demkowicz, M. Feistauer, P. Fraunié, K. Kozel, R. Rannacher

Invited Plenary Speakers: I. Babuška (USA), J.W. Barrett (GB), D. Braess (Germany), L. Demkowicz (USA), P. Fraunié (France), R. Glowinski (USA), T. Hou (USA), K. Kunisch (Austria), Yu. Kuznetsov (USA/Russia), M.A. Leschziner (GB)

Info: Prof. Dr. Miloslav Feistauer, Faculty of Mathematics and Physics, Institute of Numerical Mathematics, Charles University Prague, Sokolovská 83, 186 00 Praha 8, Czech Republic, Tel.: +420-2-219-11111, Fax: +420-2-535-229,
E-mail: nmicm@karlin.mff.cuni.cz,
Internet: `http://www.karlin.mff.cuni.cz/katedry/knm/nmicm2000`

August 9 – 13, 2000

Pacific RIM Dynamical Systems Conference, Lahaina, Maui, Hawaii

The range of applications of dynamical systems to fields outside of mathematics continues to grow unabated. Furthermore, the issues being addressed today are both more realistic and more complicated than the highly idealized systems that dominated research in the 70's and 80's. This in turn has lead to new mathematical problems and challenges.

The goal of this conference is to provide a forum within which the traditional barriers to communication, both intellectual and geographic, can be broken. The lectures, minisymposia, and poster sessions will cover a wide range of topics from theory to experiment to design of nonlinear systems. The geographic and scientific diversity of the participants will be equally broad.

Conference Themes: The themes of the 2000 conference include, but are not limited to

Ergodic Theory – Fluid Dynamics – Hamiltonian and Near Integrable Dynamics – Infinite-Dimensional Dynamical Systems – Lattice Dynamics – Materials Science – Mathematical Biology – Neuroscience – Numerical Methods – Pattern Recognition – Reaction–Diffusion Equations – Stochastic Dynamical Systems

Scientific Committee: E.J. Doedel (Concordia U, Canada), P.C. Fife (U of Utah, USA), C.K.R.T. Jones (Brown U, USA), H. Kokubu (Kyoto U, Japan), Ch. Heng Lai (National U of Singapore, Singapore), W.F. Langford (U of Guelph, Canada), H. Matano (U of Tokyo, Japan), A. Minzoni (U Nacional Autonoma de Mexico, Mexico), D.H. Terman (Ohio State U, Columbus, USA), D. Wang (Beijing U, China), Z.J. Xia (Northwestern U, USA)

Info: SIAM, 3600 University City Science Center, Philadelphia, PA 19104-2688, USA, Tel. +1-215-382-9800, Fax: +1-215-386-7999, E-mail: meetings@siam.org, Internet: `http://www.siam.org/meetings/ds99/`

August 21 – 23, 2000

International Workshop on "Scientific Computing in Electrical Engineering", SCEE-2000, Warnemünde, Germany

The aim of this workshop with the main subjects Computational Electrodynamics and Circuit Design is to bring together scientists from universities and industry with the goal of intensive discussions about modelling and numerical simulation of electronic circuits and electromagnetic fields. The workshop is mainly directed at mathematicians and electrical engineers. Developers of algorithms and programs shall come to know recent advances on the other fields as well as open problems coming from industry; industry shall come to know new program tools and mathematical methods.

This meeting continues a small series of earlier national workshops, held in Darmstadt (1997) and Berlin (1998), Germany, under the auspices of the DMV.

GAMM members are especially invited to participate in the Workshop.

Programme Committee: Michael Günther (U Karlsruhe (TH)), Ulrich Langer (U Linz, Austria), Ursula van Rienen (U Rostock), E. Jan W. ter Maten, Wil H.A. Schilders (Philips Res. Lab., Eindhoven, NL), Uwe Feldmann (Infineon Technologies, Germany)

Info: Prof. Dr. Ursula van Rienen, Chairman of SCEE-2000, Institut für Allgemeine Elektrotechnik, FB Elektrotechnik und Informationstechnik, Fakultät für Ingenieurwissenschaften, Universität Rostock, Albert-Einstein-Str. 2, D-18059 Rostock, Internet: `http://www.SCEE-2000.uni-rostock.de`

September 5 – 16, 2000

Advanced Courses: Algebraic Quantum Groups, Universitat Autònoma de Barcelona, Bellaterra, Spain

The course will treat various algebraic aspects of the theory of Quantum Groups, concentrating on the structure and respresentation theory of "quantum" versions of coordinate rings of algebraic varieties and enveloping algebras of finite dimensional Lie algebras. The viewpoint will be that of modern noncommutative algebra and representation theory. After the various "quantum algebras" have been introduced, one strand of lectures will concentrate on the root-of-unity situation, while a second will follow the generic case. The

first track leads to the study of Noetherian Hopf algebras satisfying polynomial identities, with emphasis on good homological properties and geometric relations with the maximal idea space of the center. In the generic situation, the lectures will concentrate on the geometry of the prime and primitive spectra of quantized coordinate rings.

Speakers: Kenneth Brown (U of Glasgow) and Kenneth Goodearl (U of California at Santa Barbara

Grants: The CRM can offer a limited number of grants covering the registration fee. The deadline for applying is June 5, 2000.

Info: Pere Ara (Coordinator), Centre de Recerca Matemàtica (CRM), Institut D'estudis Catalans, Apartat 50, E-08193 Bellaterra, Spain,
Tel.: +34-3-581-1081, Fax: +34-3-581-2202, E-mail: crm@crm.es
Internet: `http://www.crm.es/quantum`

September 20 – 24, 2000

Millenium International Symposium on Thermal and Fluid Sciences, Xi'an, China

In the year 2000 A.D. we would like to hold a Millenium International Symposium on Thermal and Fluid Sciences; we hope that in this Symposium the problems helpful to the next century, e.g. Environment Protection, including Pollution Control, Reducing the Greenhouse Effects, etc, will be discussed.

Topics:

- Engineering Thermodynamics
- Fluid Mechanics
- Aerodynamics of internal flows
- Flow and thermal processes in porous media
- Multiphase flow
- Heat and mass transfer
- Cryogenics
- Clean combustion
- Measurement and visualization techniques

Info: Prof. S. Yu, Institute of Engineering Thermophysics, Chinese Academy of Sciences, P.O.Box 2706, Beijing 100080, China,
Fax: +86-10-6257-5913, E-mail: shenyu@public3.bta.net.cn

October 7 – 10, 2000

International Conference on the Mathematical Modeling and Computational Experiments, ICMMCE 2000, Dushanbe, Tajikistan

Conference Themes:

- Modeling (nonlinear, ecological, economical, physical, social and other processes)
- Computing systems and technology
- Information security and business

International Organizing Committee: I.L. Bogolubsky (JINR, Dubna, Russia),

D.O. Logofet (Academy of Science, Russia), Yu.M. Svirezhev (Climate Inst., Potsdam, Germany), E.P. Zhidkov (JINR, Dubna, Russia)

Local Organizing Committee: F. Komilov, F.Kh. Khakimov, Kh.Kh. Muminov (secretary), A. Samiev, A. Tabarov, Z.D. Usmanov (Vice-Chairman), M.K. Yunusi (Chairman), R. Yusupov

Info: Prof. M.K. Yunusi, Chairman, Rudaki str. 17, Dushanbe 734025, Tajikistan,
Tel.: +7-377-2-214209, E-mail: tgnu@tajnet.com,
Internet: `http://www/tajnet.com`

October 9 – 12, 2000

Drop Tower Days 2000 in Bremen: International Workshop on short-term experiments under strongly reduced gravity conditions, Bremen, Germany

Objectives: The "Drop Tower Bremen" (ZARM) and the "Japan Microgravity Center" (JAMIC) in Sapporo have become well-established microgravity laboratories warranting continuous operation and a high quality of weightlessness. In 1995 ZARM and JAMIC decided to enter into a cooperation to provide worldwide access to experimental microgravity science and to offer well-designed solutions for nearly every experimental idea.

In 1998 the National Aeronautics & Space Administration (NASA) joined the international organizing committee of the Drop Tower Days. The workshop will now be held alternately in Japan (JAMIC) , USA (NASA) and Bremen (ZARM).

The workshop "Drop Tower Days 2000 in Bremen" will serve as a means to stimulate short-term microgravity experiments and to foster a better understanding of the exciting and interesting phenomena of microgravity science and technology.

Topics:

- Fluid Mechanics
- Multiphase Flows
- Heat and Mass Transfer
- Boiling
- Dynamicss of Drops and Bubbles
- Thermodynamics
- Thermophysical Properties
- Chemical Reactions
- Combustion
- Fluid Handling
- Material Processing
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- Biophysical Phenomena
- Polymer and Colloidal Science
- Life Science
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Advisors
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Info: DTD2000 Secretariat, Center of Applied Space Technology and Microgravity, ZARM, University of Bremen, Am Fallturm, D-28359 Bremen, Germany,
Tel.: +49-421-218-2752, Fax: +49-421-218-2521,
E-mail: DTD2000@zarm.uni-bremen.de

December 13 – 15, 2000

International Workshop on Wave Propagation – Moving Load – Vibration Reduction, WAVW 2000, Ruhr University Bochum, Germany

WAVE 2000 is the second international workshop on wave propagation, moving loads and vibration reduction. At the first fruitful workshop Wave '94 at the Ruhr University Bochum engineers, scientists, planners, students and teachers from four continents came together to discuss the latest issues in the specific fields of the workshop topics. This time 12 outstanding international specialists will present lectures and in addition 23 papers will be selected from a call for papers. Parallel sessions will not take place, so that all participants can discuss the presentations together.

The workshop will provide an ideal opportunity for participants from all around the world to share their knowledge for understanding the wave propagation phenomena, to discuss the influence of fast moving loads and to exchange their skill in mitigating the effect of harmful vibrations due to dynamic loads.

Researchers in science and engineers in practice will have the possibility to arrange contacts for further exchange of information and for future co-operations.

Topics:

- *Wave Propagation*
  Wave propagation due to environmental vibration as caused by human activities like pile-driving, tunnelling, dynamic soil compaction and production machinery in factories
- *Moving Loads*
  Vibrations and their propagation caused by moving loads (e.g. high-speed trains)
- *Vibration Reduction*
  Means of reduction of the aforementioned environmental vibrations

Invited Lectures: Invited lectures will include presentations of the state of the art of:

- simulation of wave propagation and man-made vibrations due to environmental dynamic activities,
- BEM for wave propagation in frequency and time domain,
- dynamic soil compaction and construction vibration,
- modelling of the dynamic behaviour of multiple buildings and their interaction,
- physical insight in the possible approaches for vibration reduction,
- moving load simulation methods,
- simulation of the track-soil system under moving load.

Furthermore, lectures on the development of high-speed trains (e.g. Maglev, Shinkansen, TGV, Transrapid, ICE) in Japan and Europe and on related wave phenomena will be given by invited speakers.

Scientific Committee: Günther Schmid (Ruhr U Bochum), Nawawi Chouw (Okayama U), Takeo Taniguchi (Okayama U), Sohichi Hirose (Tokyo Inst. of Technology, Japan)

Info: WAVE 2000, Ruhr University Bochum, Building IC, Room 4/135, D-44780 Bochum, Germany, Tel. +49-(0)234-32-26141, Fax: +49-(0)234-32-14463,
E-mail: wave2000@sim.bi.ruhr-uni-bochum.de,
Internet: `http://www.sim.bi.ruhr-uni-bochum.de/wave2000`

June 17 – 23, 2001

The 8th International Conference on Structural Safety and Reliability, ICOSSAR '01, Newport Beach, California, USA

This quadrennial conference is organized by the International Association for Structural Safety and Reliability (IASSAR), and is the major international forum for the exchange of information on these topics.

The conference will be especially focused on advanced technologies, computational methods, smart materials, damage assessment, social science/urban planning, and commercial applications. It will also include all of the traditional aspects of structural safety and reliability.

Info: Prof. Ross B. Corotis, College of Engineering and Applied Science, University of Colorado at Boulder, Office of the Dean, Campus Box 422, Boulder, Colorado 80309-0422, USA, Tel.: +1-303-492-7006, Fax: +1-303-492-0353,
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edited by A. Ioffe, S. Reich, and I. Shafrir, Technion-I.I.T., Haifa, Israel

The calculus of variations is a classical area of mathematical analysis – 300 years old – yet its myriad applications in science and technology continue to hold great interest and keep it an active area of research. These two volumes contain the refereed proceedings of the international conference on Calculus of Variations and Related Topics held at the Technion-Israel Institute of Technology in March 1998. The conference commemorated 300 years of work in the field and brought together many of its leading experts.

The papers in the first volume focus on critical point theory and differential equations. The other volume deals with variational aspects of optimal control. Together they provide a unique opportunity to review the state-of-the-art of the calculus of variations, as presented by an international panel of masters in the field.

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A volume in the Chapman & Hall/CRC Research Notes in Mathematics Series
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Partial Differential Equations
Theory and Numerical Solution

edited by W. Jäger, University of Heidelberg, Germany, J.O. John, K. Najzar, J. Nečas, and J. Stará, Charles University of Prague, Czechoslovakia

Volume 406 in the Chapman & Hall/CRC Research Notes in Mathematics Series
Series edited by A. Jeffrey, H. Brezis, and R. Douglas

As a satellite conference of the 1998 International Mathematical Congress and part of the celebration of the 650th anniversary of Charles University, the Partial Differential Equations Theory and Numerical Solution conference was held in Prague in August, 1998. This volume comprises the Proceedings of that conference. In it, leading specialists on partial differential equations, calculus of variations, and numerical analysis present up-to-date results, applications, and advances in numerical methods in these fields.

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Proceedings of the 18th IFIP TC7 Conference

edited by M.P. Polis (Oakland U), A.L. Dontchev (Math. Reviews), P. Krall (U of Zurich), I. Lasiecka (U of Virginia), A.W. Olbrot (Wayne State U)

Volume 396 in the Chapman & Hall/CRC Research Notes in Mathematics Series
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Top researchers in optimization and control from around the world gathered in Detroit for the 18th annual IFIP TC7 Conference on Systems Modelling and Optimization held in July 1997. The papers offered in this volume were selected from among the 250 plenary, invited, and contributed works presented at the conference. The editors chose these papers to represent the myriad and diverse range of topics within the field – in theory and applications – and to disseminate important new results.

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Generalized Difference Methods for Differential Equations Numerical Analysis of Finite Volume Methods

(Pure and Applied Mathematics: A Series of Monographs and Textbooks/226)

by Li Ronghua (U of Jilin, Changchun, China), Chen Zhong Ying (Zhongshan U, Guangzhou, China) and Wu Wei (Dalian U of Technology, China)

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Description of the award

The award comprises a certificate containing the citation and a cash prize, of 5000 euro.

Award presentation

The prize is presented every four years at the European Congress of Mathematics. A representative of the endowing Institute for Industrial Mathematics in Kaiserslautern or the president of EMS presents the award. The recipient is invited to present his or her work at the conference.

Prize history

The frist prize will be awarded in the year 2000.

Prize fund

The endowing Institute for Industrial Mathematics in Kaiserslautern is responsible for managing the prize fund as well as its administration.

Deadline for submission

Nominations for the prize must reach the Helsinki office at the following address no later than 1st March 2000:

EMS Secretariat
Ms. Tuulikki Makelainen
Department of Mathematics
University of Helsinki
P.O. Box 4 (Yliopistonkatu 5)
00014 Helsinki
Finland

Fax: +358-9-1912 3213
e-mail: makelain@cc.helsinki.fi

For further information on the Felix Klein Prize, see the WWW:

`http://www.math.ethz.ch/EMIS/ECM2/felix-klein-prize.html`

PERSONALIA

Ehrungen

Herrn Professor Dr. techn. Dr. h.c. Franz Ziegler, Technische Universität Wien, wurde am 5. Oktober 1999 in einem feierlichen Akt in der russischen Botschaft zu Wien vom Generalsekretär der Russischen Akademie der Wissenschaften in Anwesenheit des Botschafters, des Vizepräsidenten der Österreichischen Akademie der Wissenschaften und weiteren Ehrengästen die Urkund zur Wahl als ausländisches Mitglied der russischen Akademie der Wissenschaft überreicht.

Todesfälle

Prof. Dr. Nimai-Kumar Mitra, zuletzt Bochum

Dipl.–Phys. Gerda Margot Rettig, zuletzt München

P.Doz. Dr. Rüdiger Weiß, zuletzt Karlsruhe

Werbung

INFORMATIONEN ZUR GAMM MITGLIEDSCHAFT

Mitgliedsbeiträge

Für das Jahr 2000 gelten die folgenden Mitgliedsbeiträge:

Persönliche Mitglieder[1)]	150,-- DM
Ermäßigter Beitrag für persönliche Mitglieder unter 32 Jahren[2)]	80,-- DM
Persönliche Mitglieder aus Ländern Osteuropas und aus Entwicklungsländern	80,-- DM
Ermäßigter Beitrag für persönliche Mitglieder unter 32 Jahren aus Ländern Osteuropas und aus Entwicklungsländern	40,-- DM
Ermäßigter Beitrag für Studenten	30,-- DM
Ermäßigter Beitrag für Mitglieder in anderen wissenschaftlichen Gesellschaften, mit denen die GAMM ein Reziprozitätsabkommen hat[3)]	100,-- DM
Korporative Mitglieder	250,-- DM
Universitäre Einrichtungen (Bibliotheken, Institute, o.ä.)	80,-- DM

Hinweis zu den Mitgliedsbeiträgen

Die GAMM e.V. ist nach §5 Abs. 1 Nr. 9 KStG von der Körperschaftssteuer befreit, weil sie ausschließlich und unmittelbar steuerbegünstigten gemeinnützigen Zwecken im Sinne der §§ 51 ff. AO dient. Die Körperschaft fördert wissenschaftliche Zwecke. Die Mitgliedsbeiträge sind nach §10 b EStG, §9 Nr. 3 KStG und §9 Nr. 5 GewSTG wie Spenden abziehbar (Bescheid des Finanzamtes Karlsruhe–Stadt vom 21. April 1997).

Membership and Correspondence

Applications for membership should be sent to GAMM Office, c/o Prof. Dr. Reinhard Mennicken, NWF I – Mathematik, Universität Regensburg, Universitätsstr. 31, D-93053 Regensburg, Germany. Application forms are available at `http://www-GAMM.uni-regensburg.de`.

[1)] Ruheständler, arbeitslose Mitglieder sowie Mitglieder aus den neuen Bundesländern können, falls ihre finanzielle Situation dies erfordert, durch Antrag an den Schatzmeister eine Reduktion auf 80,-- DM erhalten.

[2)] Mitglieder aus den neuen Bundesländern können, falls ihre finanzielle Situation dies erfordert, durch Antrag an den Schatzmeister eine Reduktion auf 40,-- DM erhalten.

[3)] American Institute of Aeronautics and Astronautics, American Mathematical Society, Associação Brasileira de Ciências Mecânicas, Association de Mécanique du Vietnam, Association Française de Mécanique, Australian Mathematical Society, Canadian Applied and Industrial Mathematical Society, Canadian Mathematical Society, Chinese Society of Theoretical and Applied Mechanics, Czech Society for Mechanics, Indian Mathematical Society, Netherland Mathematical Society, Polish Society of Theoretical and Applied Mechanics, Sociedad Española de Matemática Aplicada, Société de Mathématiqués Appliqués et Industrielles, South African Association for Theoretical and Applied Mechanics, South African Mathematical Society.

Correspondence concerning financial issues are to be addressed to the Treasurer. All other correspondence should be directed to the Secretary of GAMM.

Privileges of GAMM Membership

GAMM publishes twice a year two issues of the GAMM–Mitteilungen, the first issue in April and the second one in October. The GAMM–Mitteilungen will publish original scientific contributions in the field of Applied Mathematics and of Mechanics. A GAMM–Rundbrief is published twice per year in January and September. Subscriptions to the Mitteilungen and the Rundbrief are included as part of the membership. Moreover, the journal Surveys on Mathematics for Industry can be obtained at a reduced rate.

The Zeitschrift für Angewandte Mathematik und Mechanik (ZAMM) regularly publishes extensive articles of the plenary lectures and the minisymposia of the Annual Meeting of the GAMM, and short notes of the communications of the participants.

Informationen zur Zahlung des Jahresbeitrages

Alle Zahlungen werden erbeten auf eines der folgenden Konten:

Deutsche Bank 24 Wuppertal
BLZ 330 700 24
Konto–Nr.: 2220911
Prof. Dr. A. Frommer, Sonderkonto GAMM

Postbank, Niederlassung Essen
BLZ 360 100 43
Konto–Nr.: 611020430
Prof. Dr. A. Frommer, Sonderkonto GAMM

Nach §6(3) der Satzung ist jedes Mitglied verpflichtet, unaufgefordert den Jahresbeitrag an den Schatzmeister zu entrichten.

Der Schatzmeister der GAMM richtet an alle Mitglieder, die über ein Konto in Deutschland verfügen, die dringende Bitte, sich dem Einzugsverfahren anzuschließen. **Das Einzugsverfahren ist die zuverlässigste und kostengünstigste Möglichkeit, die Jahresbeiträge zu bezahlen.** Füllen Sie dazu bitte das entsprechende Formular aus und senden Sie es an

Schatzmeister der GAMM, Prof. Dr. A. Frommer,
Fachbereich Mathematik, Bergische Universität - Gesamthochschule Wuppertal,
D–42097 Wuppertal.

Information by the treasurer

As a new service for our members, GAMM accepts payment of dues by credit cards. Please fill in the attached form and send it to

Treasurer of GAMM, Prof. Dr. A. Frommer,
Department of Mathematics, Bergische Universität - Gesamthochschule Wuppertal,
D–42097 Wuppertal, Germany.

Prof. Dr. A. Frommer
Fachbereich Mathematik
Bergische Universität -
Gesamthochschule Wuppertal
D–42097 Wuppertal
Germany

ERMÄCHTIGUNG ZUM EINZUG DES MITGLIEDSBEITRAGS

Ich erkläre mich widerruflich damit einverstanden, daß die Gesellschaft für Angewandte Mathematik und Mechanik GAMM e. V. den jeweils gültigen Jahres-Mitgliedsbeitrag von meinem unten angegebenen Konto abbucht.

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Konto-Nr.: .....

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(Datum, Unterschrift)

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