SUMMER SCHOOL ON DIFFERENTIAL GEOMETRY

Coimbra, 3/7 September, 1999

ORGANIZERS:

Joana M. Nunes da Costa - Univ. de Coimbra
F. J. Craveiro de Carvalho - Univ. de Coimbra
Joana Teles Correia - Univ. de Coimbra
Raquel Caseiro - Univ. de Coimbra
A. M. d'Azevedo Breda - Universidade de Aveiro
Bernd Wegner - Technische Universität Berlin

STRUCTURE:

- 12 hour course on Geometry of Submanifolds by Dirk Ferus - Technische Universität Berlin

- 12 hour course on Poisson and Symplectic Geometry by I. Vaisman - Haifa

- Four 1 hour conferences, one per day, by

    - David R. J. Chillingworth - Southampton

    - Sheila Carter - Leeds

    - Jean Pierre Françoise - Paris

    - Bernd Wegner - Berlin

- Sessions where participants can talk on their own work.

Information available at

http://www.mat.uc.pt/diff_geo.html

PROGRAMME FOR 2000

At the meeting on 10th April 1999 the CIM Scientific Council gave their approval to the following events:

MACAU 2000
MATHEMATICS AND ITS ROLE IN CIVILIZATION

ORGANIZERS

Portugal

Graciano Neves de Oliveira, Department of Mathematics, University of Coimbra, president of the Portuguese Mathematical Society;

João Filipe Queiró, Department of Mathematics, University of Coimbra, representing the Centro Internacional de Matemática.

China

Yu Chong-hua, Department of Mathematics, Fudan University, Shanghai;

Zhang Wen-ling, National Natural Science Foundation of China, Beijing.

Macau

Iu Vai Pan, dean of the Faculty of Science and Technology, University of Macau;

Raymond Che-Man Cheng, Faculty of Science and Technology, University of Macau;

Zhou Chao Chen, Director of UNU/IIST, International Institute for Software Technology, United Nations University.

DATE

11th to 14th January 2000.

STRUCTURE

Aiming at a worldwide participation, the scope of the conference includes topics such as:

Comparison of the role of Mathematics in different civilizations, and exchanges and interactions in the past, with particular emphasis on the East/West encounter of mathematical cultures;

The role of Mathematics in calendars, astronomy and cartography, and other aspects of Mathematics as a driving force in human progress;

Current co-operation between industrialized and developing countries in the mathematical sciences and contributions of Mathematics for sustainable economical, industrial and social development;

Mathematical research and education for science and technology and the popularization and understanding of Mathematics in diverse cultures;

Perspectives of Mathematics in the future of civilization and its role in the Information Society.

Second Debate on Mathematical Research in Portugal

ORGANIZERS

Joana Soares,University of Minho;

Luís Nunes Vicente,University of Coimbra;

Rafael Santos, University of Algarve.

This is a CIM/SPM event.

DATE

Not fixed yet but shortly after the completion of the second research assessment process.

STRUCTURE

Among other topics, the meeting will focus on:

The process of evaluation of the research units in the triennal period of 96-98.

The organizational model of research in Portugal:

The structure of doctorate and post-doctorate programs. New areas, different directions.

The research career vs the professor career (*Carreira de Investigação Científica vs Carreira Docente Universitária*) in the context of mathematical studies.

Research units and university departments: the benefits and disadvantages of the interaction of two networks.

The internationalization of portuguese mathematics and mathematicians.

The applications of mathematics in (a not so strong) economy. Case studies.

How well is mathematics doing in Portugal compared to other sciences? Views from other scientific fields.

Thematic term on Dynamics, Bifurcation and Biology

ORGANIZERS

J.A. Basto-Gonçalves, I.S. Labouriau, CMAUP and Faculdade de Ciências da Universidade do Porto.

Each subevent has its own organizing committee.

DATE

May to July 2000.

STRUCTURE

2nd May to 6th May, School on Dynamical Systems;

8th May to 13th May, International Conference on Dynamical Systems;

June, School on singularities;

29th June to 4th July, Workshop on Bifurcations, Symmetry and Patterns;

5th July to 14th July, School on Bifurcations, Symmetry, and Patterns;

10th July to 21st July, School on Dynamics and Patterns in Biology;

24th July to 28th July, Workshop on Dynamics and Patterns in Biology;

Long term visitors.

ORGANIZERS

P.Colli, University of Pavia, Italy;

J.F.Rodrigues, University of Lisbon, Portugal.

This is a CIM/CIME Summer School.

DATE: 3rd to 9th July 2000.

STRUCTURE

Series of five complementary courses with 3 or 4 lectures of 1h/1h30m for each course and a limited number of selected talks of 20/30 minutes each by young researchers or postdocs.

WORKSHOP ON PARTIALLY KNOWN MATRICES AND OPERATORS

ORGANIZERS

Fernando C. Silva, University of Lisbon;

António Leal Duarte, University of Coimbra;

Isabel Cabral, New University of Lisbon;

Susana Furtado, University of Oporto.

DATE: 3 days in September 2000.

STRUCTURE

12 invited 1-hour talks and some contributed 20-minute talks.

The Council also supported the intention of submitting a proposal for a Thematic Term on "Semigroups, Algorithms, Automata and Languages" in the year 2001 expressed by Jean-Eric Pin, University of Paris 7, Gracinda M. S. Gomes, University of Lisbon and Pedro V. Silva, University of Oporto.

GREAT MOMENTS IN XXTH CENTURY MATHEMATICS

We have posed the following question to several mathematicians:

> *If you had to mention one or two great moments in XXth century mathematics which one(s) would you pick up?*

The choices of Professor Gareth Jones (Faculty of Mathematical Studies, University of Southampton, United Kingdom) are given below.

For me, one of the highlights of 20th century mathematics was the classification of finite simple groups, eventually achieved (apart from a few details) around 1980. As a research student in Oxford in the late 1960s, I was there when visitors like John Conway, Don Higman and Charles Sims were constructing their new simple groups, while others such as Dan Gorenstein and John Thompson were making great strides towards classifying them. This result turned finite group theory on its head: instead of working with axioms, group theorists could now prove results "by inspection". The result itself is also fascinating: as well as the uniform families of simple groups, which mirror the classification of simple complex Lie algebras, there are the 26 sporadic groups, a wonderful adventure playground for those interested in combinatorial phenomena, and also number theory in the case of the Monster group.