

Declaration of Rio De Janeiro On Mathematics

On May 6th, 1992, in Rio-de-Janeiro, during the celebration of the 40th anniversary of the world-wide reputed Institute of Pure and Applied Mathematics (IMPA), Professor Jacques-Louis LIONS, President of the Interational Mathematical Union (IMU) declared in the name of this Union, that the year 2,000 will be **WORLD MATHEMATICAL YEAR**.

WMY 2,000 (WORLD MATHEMATICAL YEAR 2,000) is set under the sponsorship of UNESCO (Professor Federico MAYOR), of the **THRID WORLD ACADEMY OF SCIENCES** (Professor Abdus SALAM and Professor Carlos CHAGAS, who took part in the Declaration of Rio de Janeiro), of the **FRENCH MINISTER OF RESEARCH AND SPACE** (Professor H. CURIEN), of the **BRAZILIAN STATE SECRETARY OF SCIENCE AND TECHNOLOGY** (Professor Helio JAGUARIBE), of the **BRAZILIAN ACADEMY OF SCIENCES** (Professor Israël VARGAS) and of the **SWISS FEDERAL COUNSELLOR**, Dr. Flavio COTTI, the next International Congress of Mathematicians being organized in Zürich in August 1994.

The Declaration of Rio de Janeiro sets three aims.

1. - **First aim:** the great challenges of the 21st century.

During the conference in Paris in 1900, the Mathematician, David HILBERT, listed a series of the main problems that the now ending century has to challenge.

The American Mathematical Society suggested in 1990, at the last General Assembly of IMU in KOBE (JAPAN), that first class mathematicians, to be represented within the **Turn of the Century Committee** organize the efforts to envision what the great challenges of the year 2,000 would be. This Committee is chaired by Professor Jacob PALIS Jr., IMPA, General Secretary of IMU.

2. - **Second aim:** Mathematics, Keys for Development

Pure and Applied Mathematics is one of the main keys of the understanding of the world and of its development.

That is why it is essential that the countries which are members of UNESCO are gradually able to reach a level enabling their admission to IMU, the members of which are 50 nations for the time being.

Therefore, the second aim of the DECLARATION of RIO de JANEIRO is that most countries which are members of UNESCO reach such a level for the turn of the century.

That implies great additional efforts in the fields of Education, of Training, and - as a very sensitive point for countries that face difficulties in having currency resources - of access to Scientific Information.

Such efforts, which have already been widely undertaken will be confirmed and raised by the two main commissions of IMU : I.C.M.I. (International Commission on Mathematical Instruction), which is chaired by Professor M. de GUZMAN, from Madrid and whose General Secretary is Professor M. NISS from Denmark, and the C.D.E. (Commission on Development and Exchange), which is presided by Professor M. S. NARASIMHAN, from Bombay and whose General Secretary is Professor P. BERARD, from Grenoble, France. Both Commissions are linked with UNESCO, which are represented in Rio de Janeiro by Professor A. MARZOLLO, responsible for Mathematics.

3. Third aim: the image of Mathematics.

The DECLARATION of RIO de JANEIRO sets as Third aim, which also has the greatest importance, a systematic presence of mathematics in the "information Society" thanks to examples and applications which will be scientifically exact and open to the largest number.

That will be developed in connection with such efforts which have already been undertaken by many countries that are members of IMU.

The DECLARATION of RIO de JANEIRO on MATHEMATICS announcing the WORLD MATHEMATICAL YEAR 2,000, was warmly supported not only by all the mathematicians present in Rio and who had come from all continents, and by of course many of the Brazilian most eminent mathematicians, but also by Professors in other subjects too, and especially Professor Carlos CHAGAS former President of the Pontifical Academy of Sciences.