The IV-th Congress of the Group of Romance-Speaking Mathematicians

The IVth Congress of the Group of Romance-Speaking Mathematicians was held this year from 17 to 24 September, in Bucharest and Braşov.

The Congress was attended by almost 300 experts in mathematics, among whom 160 guests coming from 25 foreign countries.

The Congress was opened by a special session commemorating the hundredth anniversary of the eminent French mathematician, Elie Cartan. Six reports on Cartan's works and on their significance were presented, namely by André Lichnérowicz (France), "The Life and Work of Cartan", by G. Vrînceanu (Romania), "The Impact of Cartan's Works in Romania", by Georges De Rham (Switzerland), "The Work of Elie Cartan and Topology", by Masatake Kuranischi (Japan), "Differential Systems and Infinite Lie Groups", and by Jean Dieudonne (France), "Algebras and Lie Groups".

The proceedings were carried out in plenary sessions and in specialized sections.

Section 1: Algebra and the Theory of Numbers
Section 2 (A): Analysis and Functional Analysis
Section 2 (B): Equations
Section 3: Geometry and Topology
Section 4: Mathematical Physics and Mechanics
Section 5: Applied Mathematics

Moreover, four round-table sessions were organized, with the following subject matters.

I. Future prospects and trends in mathematics, viewed as the science of structures.
II. Contributions of logic and mathematics to economic and humanistic sciences progress.
III. The impact of ordinates on mathematical development.
IV. Mathematical models and methods, as tools used in scientific research.

In the following, we shall refer to the proceedings of Section 5. The fourty nine papers submitted in this Section, concentrated on highly diversified problems, such as: the diagnosis based on Boolean equations, the elaboration of discrete systems with random parameters, mathematical programming problems, numeric solving of the higher degree equations, unsteady-state finite automata.

A great number of papers were concerned either with the theory of graphs applications in studying the variants of the Romanian poem „I have a sole yearning left", with ascertaining the ranking order of one text's various translations from the viewpoint of their accuracy degree, with studying unsteady-state finite automata, or with the solving of some theoretical problems included in the graph theory.

During the last two decades, the mathematical applications comprising new fields of activity have been widely extended. Thus, a report was submitted on the subject of mathematical applications in the theatre area. By using the probability theory, the frequency of two characters' meetings in the same scene is analyzed, and as a result, the more or less close relation between characters in the play could be derived without knowing the text.

Another group of papers discussed questions related to the solution of some practical problems by using computers: the determination of the convex hull of a set of points with

the computer DACIC-1. Boolean functions minimization with the TITAN computer at the Cambridge University.

The matters for consideration by linguistics were reflected in ten reports presented by Romanian mathematicians.

Research workers from the Centre of Economic Computation and Economic Cybernetics contributed to the proceedings of this Congress with six papers by nine scientists.

The over two hundred reports, reviews, original research accounts and papers presented on this occasion gave rise to lively and interesting debates, of a high scientific level. General reports by well known authors enjoying a widely recognized reputation of competence were submitted, on major branches in the field of pure and applied mathematics.

The proceedings of the IV-th Congress of Romance-Speaking Mathematicians were remarkably successful, as they allowed a wide exchange of ideas between Romanian and foreign mathematical scientists, as well as the mutual acquaintance of mathematicians working in the same fields.

I. M. STANCU-MINASIAN