FIFTY YEARS SINCE THE FIRST CONGRESS AND FOUNDATION ASSEMBLY OF THE UNION OF THE SOCIETIES OF MATHEMATICIANS AND PHYSICISTS OF YUGOSLAVIA

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The first congress of mathematicians and physicists of the Federative National Republic of Yugoslavia (FNRY) was held at Bled, November 8–12, 1949. On the last day of the Congress the Foundation Assembly of the Union of the Societies of Mathematicians and Physicists of Yugoslavia (USMPY) met. The Congress had been prepared and held in the time of total isolation of Yugoslavia. During that time any kind of cooperation with the countries of the so-called Western Block hardly existed, and the Eastern Block, to which we belonged, had suddenly put us in a state of total isolation after the Cominform Resolution.

Officially, the preparations for the First Congress started in March of 1949, when the Ministry for Science and Culture of the FNRY Government nominated the Steering Committee for the preparation of the Congress, composed of the delegates of mathematicians and physicists from all six Yugoslav republics. The first meeting of the Steering Committee was on April 5–6, 1949. One of the recommendations was to form the republic sub-committees for preparation of the Congress. At the second meeting of the Steering Committee the decision was taken the Congress should be held at Bled on November 8–12 of the same year.

The initial conditions for founding the Union had already existed, and the accumulated problems in the country destroyed by war and lacking expert staff expected help of a professional society. It was necessary to help the authorities in recognizing the current state in the education process and seeking the appropriate solutions concerning teaching and research in the field of mathematics. In the republics, the state was as follows:

The Founding Assembly of the Society of Mathematicians and Physicists of Serbia met on January 4, 1948. The same year, branch offices were formed in

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13 places in Serbia. Already the next year the first issue of the journal "Vesnik Društva matematičara i fizičara NR Srbije" appeared (today the present journal "Matematički Vesnik").

Within the Croatian Society for Sciences the section for mathematics and physics worked and they published the journal "Glasnik matematičko fizički i astronomski". In April 1949, the Society of Mathematicians and Physicists of Croatia was founded.

In October 1949 the Society of Mathematicians and Physicists of Slovenia and the Society of Mathematicians and Physicists of Bosnia and Herzegovina were founded. The same month the Steering Committee was formed for founding the Society of Mathematicians and Physicists of Macedonia.

In July of 1949 the Steering Committee for founding the Society of Mathematicians and Physicists of Montenegro was founded.

In this way, the necessary conditions had been created for the work of the Congress and for foundation of the USMPY.

The Congress was attended by 42 delegates from Bosnia and Herzegovina, 26 delegates from Macedonia, 66 delegates from Slovenia, 101 delegates from Serbia, 86 delegates from Croatia, and 7 delegates from Montenegro.

The Congress was opened and greeted by academician Josip Plemelj. Of the guests spoke R. Čolaković and J. Potrč.

Three reports prepared by the commissions formed by the Steering Committee for preparation of the Congress were presented: Teaching of mathematics, physics, and astronomy in high schools; Teaching mathematics and physics at the university and college level; On the struggle against formalism and the struggle for ideological orientation in teaching mathematics, physics and astronomy.

There were only 18 individual mathematical contributions.

At the end, the Congress adopted the "Resolution on teaching mathematics, physics and astronomy and the struggle against formalism" and academician Josip Plemelj was elected honorary member of the Union.

As we have already mentioned, on the agenda of the last day of the Congress there was the decision on founding the Union of the Societies of Mathematicians and Physicists of Yugoslavia and the Congress unanimously approved the decision about its foundation. Also, the Union Statute was adopted and the Plenum and Executive Committee of the Union were formed.

The Executive Committee of the Uniom:

President: Pavle Savić

Vice-Presidents: Katarina Kostić (Serbia), Milenko Sevdić (Croatia), Oton Sajovic (Slovenia), Branko Galeb (Bosnia and Herzegovina), Petar Jovanović (Montenegro), Dragoslav Mitrinović (Macedonia).

Secretaries: Dobrivoje Mihailović and Borivoje Rašajski.

Treasurer: Vojislav Mihailović

Members: Dragiša Ivanović, Jovan Karamata, Vojin Dajović, Živojin Ćulum.

What do the above data about I Congress show? The Congress participants were the deputies (to the Congress too, and not only to the Constitutive Assembly of the Union) from particular republics. They were delegated by the republic societies in consultation with the Ministry for Education, the Committee for Scientific Institutions and scientific institutions.

The focus of the Congress was on three reports prepared by the commissions. The number of individual contributions was relatively small. When the research work is concerned, it can be seen that only a limited number in the field of mathematics were represented. The reports were under the influence of the Communist Party ideology which had also an important place in the discussion on professional issues. On the basis of the reports it can be concluded that both teaching of and research in mathematics were faced with the numerous problems whose gravity differed from region to region. Finally, it is evident that republic societies relied mainly on the staff from the capitals and from universities.

As for the Union, we can conclude the following:

The Union members could be the republic societies or branches of the societies from the domain of natural sciences. Regarding the Statute and activity of the Union, intentions to move away from the Stalinist schemes that professional societies are also the levers of the federal government, can be clearly seen. A full equality was ensured of all the societies and independence in the implementation of the general policy agreed upon in the Union. Considering the work of the Union Plenum one gets impression that such conceptions had been realized with no difficulties or misunderstanding.

Up to now, nine congresses have been held. Although the first three congresses included also astronomy (both the participants and contributions), they were in fact the congresses of mathematicians and physicists. The congresses from the fourth to the eighth were called the congresses of mathematicians, physicists and astronomers, the ninth congress being the Congress of Mathematicians of Yugoslavia (consisting of Serbia and Montenegro).

Here is a survey of the congresses and the names of the Union presidents elected at these congresses:

I Congress: Bled, November 8–12, 1949. (Pavle Savić)

II Congress: Zagreb, October 4–10, 1954. (Đuro Kurepa)

III Congress: Belgrade, September 19–24, 1960. (Sreten Šljivić)

IV Congress: Sarajevo, October 4–9, 1965. (Danilo Blanuša)

V Congress: Ohrid, September 14–19, 1970. (Blagoj Popov)

VI Congress: Novi Sad, August 28–September 2, 1975. (Dragiša Ivanović)

VII Congress: Bečići, October 6–11, 1980. (Vojin Dajović)

VIII Congress: Priština, September 23–27, 1985. (Đorđe Bekuzarov)

IX Congress: Petrovac na moru: May 22–27, 1995. (Vladimir Mićić)

At every new congress, the number of participants with contributions showed an increase, and more and more branches of mathematics have been represented. As for the problems of education, the old practice of presenting reports of general

nature has been slowly abandoned and the contributions concerning the problems from the direct methodological practice appeared instead. We shall illustrate these observations by the following data:

Number of participants with contributions:

The II Congress attended 59 mathematicians with contributions; III 106; IV 134; V 167; VI 170, whereas the number for the VII Congress was much higher: 357 scientific contributions and 64 from mathematical education. At the VIII Congress there were 230 contributions and at the IX Congress 242 scientific contributions and 33 from the domain of mathematical education.

The structure of particular working sections at the congresses is very indicative for the development of the branches of mathematics that had been nurtured in our country.

From the I Congress with only 18 contributions from mathematics we arrived at the IX Congress with a rich structure of sections. Let us mention them:

Algebra and Logic. Number Theory and Algebraic Geometry. Geometry and Topology. Lie Groups and Representations. Real and Complex Analysis. Operator Algebra and Functional Analysis. Probability and Statistics. Partial Differential Equations. Ordinary Differential Equations and Dynamical Systems. Combinatorics and Graph Theory. Numerical Analysis and Optimization. Computer Sciences. Teaching and Popularization of Mathematics. History of Mathematics.

The USMPAY (six republic societies) ceased to exist after separation of the four republics from Yugoslavia. Two republic societies, of Serbia and Montenegro, at the Founding Assembly held June 17, 1994 formed the Union of the Societies of Mathematicians of Yugoslavia (USMY) and elected the Executive Committee of the Union: Vladimir Mićić (President), Slobodanka Janković (Secretary General), Radoje Šćepanović, Zoran Kadelburg, Veselin Perić, Milosav Marjanović and Rade Doroslovački, members. The Foundation Assembly also approved the Statute of the USMY.

In addition to preparation of congresses, the Union has had a rich activity. Immediately after its foundation it faced with some very complex problems. One of the problems was the tendency of the Ministry for Education to pass a great deal of their responsibility to the Union.

The Union has always reacted promptly by concrete activities. It should be borne in mind that the majority of assignments the Union has carried out through the republic societies. Here we are going to mention only those activities that were organized by the Union itself.

Already at the I Union Plenary Session, May 1950, it was decided to start "Matematičko-fizički list", a magazine for high-school students and its publishing was committed to the Croatian Society. In May 1995 "Tangenta", a Yugoslav magazine for mathematics and computer science intended for high-school students was launched. In 1951 the Union took over from the Ministry of Education the journal "Nastava matematike i fizike u srednjoj školi", whose publishing was committed to the Serbian Society. In 1954, the journal's name was changed into "Nastava matematike i fizike" and since 1974 its name has been "Nastava matematike", and

it covers teaching of mathematics and computer sciences at all levels. The Union Plenary Session in 1962 initiated publishing of "Matematicki list", a magazine for pupils of primary ans secondary schools. The magazine is issued even today by the Society of Serbia.

We should certainly point out here the organization of competitions of pupils of secondary and high schools in mathematics and computer science. The Union, through its Federal Commission for Young Mathematicians, has organized competitions at the federal level and participation in the corresponding international competitions. The first federal competition was organized by the Society of Mathematicians and Physicists of Serbia in 1960. Our debut at the mathematical olympiads was in 1963 (V Mathematical Olympiad in Poland). Since 1987 Yugoslav competitors have taken part in the Balkan Mathematical Olympiads. The first Junior Balkan Mathematical Olympiad (for secondary school pupils) was held in Belgrade 1997. Finally, Yugoslavia joined international competitions in Informatics since 1989.

According to data that were kindly supplied by Milica Dajović, Yugoslavia was the host, and the Union the organizer, of the following international competitions:

1. IX International Mathematical Olympiad (for high-school students), Cetinje and Budva, July 3–12, 1967;
2. XIX International Mathematical Olympiad (for high-school students), Aranđelovac and Belgrade, July 4–13, 1977;
3. VI Balkan Mathematical Olympiad (for high-school students), Split 1989;
4. XI Balkan Mathematical Olympiad (for high-school students), Novi Sad 1994;
5. I Balkan Mathematical Olympiad (for secondary school pupils), Belgrade 1997.

In addition to the problems of teaching, the organization and development of research have waited for new stimuli. The Union never had its journal, though the issue has been raised several times during the existence of the Union. Some of the republic societies (Croatia, Serbia and Slovenia) had their journals even before the foundation of the Union, and the others founded them later.

The Union has been a direct organizer of several scientific meetings of international character (these data have also been preserved thanks to Milica Dajović):

1. 5th Balkan Mathematical Congress, Belgrade, June 24–30, 1974;
2. International Topological Symposia and Conferences: Herceg-Novi 1968; Bečići 1972; Belgrade 1977; Dubrovnik 1985; Dubrovnik 1990.
3. International Symposia on Complex Analysis and Applications: Aranđelovac 1984; Bečići 1986; Herceg-Novi 1988; Aranđelovac 1997 (the last one was on Mathematical Analysis and its Applications).
4. International Symposium "Coordination of Teaching Mathematics and Physics", Belgrade 1960, with participation of about 30 outstanding mathematicians from abroad.
5. Differential and Partial Equations, Belgrade 1957.

An important and responsible role the Union has had in establishing the links between our mathematics and international mathematical organizations: Interna-

tional Mathematical Union (IMU), European Council and the Balkan Mathematical Union.

The International Mathematical Union was founded after World War I, in 1920. Its activity was suspended in 1932, and renewed after World War II. The first postwar International Mathematical Congress was held in Cambridge August 30–September 6, 1950, where a decision was taken to renew the IMU activity. The National Committee of Yugoslavia (under auspices of the Academy Council) decided on February 26, 1952 to delegate Đ. Kurepa to the IMU General Assembly in Rome, held March 6, 1952. Yugoslavia became a member with two votes. Thus at the IMU General Assembly (the Hague, August 31–September 1, 1954) Yugoslavia was among 12 countries which started the activities of the renewed IMU.

The idea of founding the European Federation of Mathematical Societies has been launched ad hoc by the Committee for Mathematics (CM) of the European Science Foundation (ESF) at its first meeting on July 6, 1976. The Committee for Coordination of Science and Technology of SFRY was an ESF member. The Yugoslav representative in the ad hoc Committee for Mathematics was N. Prijatelj. Already at the second meeting of this Committee, the USMPAY had its representative (B. Stanković). Thus, our Union was among those 16 European countries that had initiated and prepared the foundation of the Federation of Mathematical Societies of European Countries.

In the year 1965 the activities of the Balkan Mathematical Union was renewed. On the initiative of the Mathematical Institute of the Romanian Academy of Sciences and the Romanian Mathematical Society a meeting of the representatives of mathematicians of all Balkan countries: Albania, Bulgaria, Greece, Yugoslavia, Romania and Turkey, was held in Bucharest July 8–9, 1965. At this meeting, our country was represented by the USMPAY, the delegates being Tatomir Anđelić, Ernest Stipanić and Pavle Papić. The following was unanimously decided: to renew activity of the Union and to form a committee which would prepare the Union Statute; the congress of mathematicians of the Balkan countries was to be held in Bucharest in the autumn of 1966, when the Union Statute was to be accepted. Our Union of the Mathematical Societies still takes part in the activities of the Balkan Mathematical Union.

At the present, at an international level, our Union has similar problems as 50 years ago. At that time we endeavoured to join the international mathematical organizations, at the present we have to strive to remain in them.

In the country, the Union presently acts under new conditions when the republic societies focus their attention onto the assignments of a professional association devoid of the burden of direct tasks in the organization and accomplishment of education and research processes. However, the limiting factors are the economic situation, international relations, and financial resources.

I am going to conclude this retrospective talk by calling all of you to recall the names of all those numerous mathematicians who enthusiastically have acted in the local and regional branches, republic societies, and the Union.