

# Society of Mathematicians and Physicists of Montenegro

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The Montenegrin Society of Mathematicians and Physicists is an association that brings together primary and secondary school teachers, as well as university teachers of mathematics and physics, and other individuals engaged with these sciences or dealing with pedagogical-methodological issues related to mathematics and physics in Montenegro. The society unites about 550 members.

Activities on the renewal of various scientific and professional institutions and organisations in Yugoslavia, as well as the formation of the new ones, began right after the end of World War II. Yugoslav professional associations, as well as the Association of Mathematical and Physical Societies of Federal People's Republic of Yugoslavia, were organised as unions of the corresponding associations of the federal states.

In Montenegro, the smallest Yugoslav republic, there were at that time no institutions of higher education. The establishment of the Higher Pedagogical School in Cetinje, the historical capital of Montenegro, in October 1947, marked the beginning of organised higher education, and can also be considered as the beginning of scientific research in the fields of mathematics and physics in Montenegro. Primary school teachers were trained in that institution, as well as teachers of mathematics and physics at higher levels. The first teachers in the mathematics/physics study programme were mathematician *Lazar Karadžić* and physicist *Petar Jovanović*. Starting in 1963, the teacher-training studies were moved to the Pedagogical Academy in Nikšić.

Following the creation of the Higher Pedagogical School, the Natural Society of Montenegro was formed, and it included a section of mathematicians and physicists. Among others, professors *Lazar Karadžić* and *Petar Jovanović* joined the Executive Board of the Society. The section had the task of improving education in these disciplines, contributing to the development of teachers' professional skills, providing help to the educational authorities in conducting educational reforms, initiating and encouraging scientific work in these areas, and popularising the sciences among gifted students.

In November 1949, the First Congress of Mathematicians and Physicists of Yugoslavia was held in Bled (Slovenia). A seven-member

delegation from Montenegro participated in the congress. During the congress, the decision was made to establish the Association of Societies of Mathematicians and Physicists (and Astronomers) of Yugoslavia (only after 1980 were the words "and Astronomers" deleted from the name of the Society). Both the plenum and the Executive Board of the alliance were elected. Mathematician *Dušan Gvozdenović* and physicist *Petar Jovanović* from Montenegro became members of the plenum. On that occasion, the Yugoslav Association stated that the Association of Mathematicians and Physicists of Montenegro should be established without delay. The Montenegrin Society of Mathematicians and Physicists was finally created in 1959, with goals similar to those of the Mathematical-Physical Section of the Natural Society.

Professors of the Higher Pedagogical School in Cetinje, *Dušan Gvozdenović* and *Momčilo Kosmajac* were elected president and secretary of the association. The first competition of high school students was organised in 1967; however, it did not include all schools in Montenegro. After the first competition, several more competitions in mathematics and physics (and later in programming) were organised at the level of primary and secondary schools. Since there was no scientific or professional journal in the field of mathematics and physics in Montenegro at that time, both teachers and students from Montenegro contributed to professional journals published outside Montenegro in the Serbo-Croatian language.

The University of Montenegro, the first institution of higher learning in Montenegro, was established in 1974. The Institute of Mathematics and Physics was established in 1978, and gathered under its roof all the study programmes of mathematics and physics taught at the University. The first generation of students enrolled in the study programmes of mathematics and physics in 1980. The first director of the institute was a professor at the University of Montenegro: the mathematician *Predrag Obradović*, who was also the first doctor of mathematical sciences in Montenegro (having received his PhD from the University of Zagreb in 1974). Later, with the opening of the Biology Department, the Faculty of Natural Sciences and Mathematics was founded. We should also mention the creation of the study programme for computer sciences, initially as a part of the study programme in mathematics, but subsequently as an independent subject in itself.

The founding of the institute, the enrolment of the first generation of students of mathematics and physics, and the hiring of new faculty galvanised the work in the fields of mathematics and physics in Montenegro. The institute became the centre of all important activities within the mathematical and physical community in Montenegro. Cooperation with state educational institutions gained momentum; seminars for teachers of mathematics and physics in primary and secondary schools were held regularly; cooperation was established with faculties of mathematics and physics in other university centres; young associates received professional training (in particular from Moscow State University within a broader framework of cooperation with this university), student competitions and scientific meetings were organised. The Association of Mathematicians and Physicists of Yugoslavia entrusted the Society of Mathematicians and Physicists of Montenegro with the organisation of the VII Congress of Mathematicians and Physicists of Yugoslavia, which was held in 1980 in the coastal town of Bečići (Montenegro). The society organised the congress together with the Montenegrin Institute of Mathematics and Physics. Around 1,500 mathematicians and physicists took part in the various sections of the congress. The most populous section was “teaching mathematics”. Very lively discussions took place, addressing a range of teaching issues at all levels of education. The congress showed that the number of disciplines studied by mathematicians in Montenegro, and in Yugoslavia as a whole, expanded significantly at that time, and that mathematicians in Yugoslavia, as well as Montenegrin mathematicians, were dealing with modern mathematical disciplines and problems.

In 1993, the first scientific mathematical journal in Montenegro, *Mathematica Montisnigri*, was founded by the Faculty of Natural Sciences and Mathematics of the University of Montenegro and the Association of Mathematicians and Physicists of Montenegro. Professor of the University of Montenegro *Žarko Pavićević* was appointed editor-in-chief of the journal.

With the dissolution of Yugoslavia, the Federation of the Yugoslav Societies of Mathematicians and Physicists ceased to exist. At that time, in 1994, the Societies of Serbia and Montenegro founded the new Federation of Mathematical Societies of Yugoslavia and Federation of Yugoslav Physical Societies. The federation entrusted the Association of Mathematicians and Physicists of Montenegro with the organisation of the IX Congress of Mathematicians of Yugoslavia. The congress was held in Petrovac, Montenegro in 1995, with the participation of about 500 mathematicians.

In 2006, after the referendum, Montenegro became an independent state. The Federation of Yugoslav Societies no longer existed, and the Montenegrin Society of Mathematicians and Physicists was admitted to the European Mathematical Society in 2007, and afterwards to the International Mathematical Union. The first congress of mathematicians and physicists of Montenegro was held in 2010 in Petrovac, organised by the Montenegrin Society of Mathematicians and Physicists and the Faculty of Natural Sciences and Mathematics of the University of Montenegro. About 300 teachers of mathematics from the primary and secondary schools as well as from the university units attended the congress. It included the following sections: teaching mathematics, physics and informatics in Montenegro, mathematics, physics, computer science.

Since its foundation, the Montenegrin Society of Mathematicians and Physicists has been working to create better conditions for the development of mathematics and physics in Montenegro. Members of the society participate in European and world congresses and international scientific conferences, and also organise scientific conferences in Montenegro, while students from Montenegro are given support to participate in international mathematical competitions. The society contributes to all activities of educational and scientific institutions related to mathematics and physics, supports modernisation of teaching/curricula and engages in popularisation of these sciences in Montenegro.

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