

FOREWORD

The contribution of Romanian mathematicians to the field of geometry, especially differential geometry, is very significant. In this context, the Institute of Mathematics of the Romanian Academy from Bucharest (IMAR), has played an important role. The institute was founded 70 years ago (in 1949) and, despite the period 1975 - 1990 (which was - from social point of view - dramatic, and - from cultural point of view - tragic) is still today an outstanding research institute of top scientific level.

Taking into account on one hand the long tradition in the study of differential geometry in Romania and, on the other hand, the fact that after 1989 organizing international meetings in Romania became easier, twenty six years ago (in 1993) we began to organize every second year (together with some of our younger colleagues) a series of international workshops on differential geometry and its applications. These workshops were organized in various academic centers from Romania. Between 1997 and 2007, in cooperation with my colleague Tudor ZAMFIRESCU, we also organized a series of four German - Romanian Seminars on Geometry: two in Romania (in 1997 - Sibiu and in 2003 - Cluj-Napoca) and two in Germany (in 2000 and 2007 in Dortmund).

In 2019, the organizers of the workshop were Radu IORDĂNESCU and Florin NICHITA from IMAR, the local organizers being Cristian MARINOIU, Gabriela MOISE, and Rafail Mihai PASCU from Petroleum-Gas University of Ploiești. I take this opportunity to mention here that forty years ago (in 1979) Prof. Dr. Gheorghe VRÂNCEANU, who was an important Romanian personality working in the field of differential geometry, passed away. The main goal of these meetings was to offer, especially to young Romanian mathematicians, the opportunity of direct contact with outstanding personalities over the world and to establish further scientific cooperations with them. In this respect, more than 30 talented Romanian young geometers (from Arad, Bucharest, Constanța and Timișoara) obtained - through above mentioned workshops and seminars - grants for summer schools, as well as master, Ph. D. or postdoc grants in Switzerland, France, Germany, Italy, Spain and the USA.

As a consequence of these workshops three important and efficient scientific agreements were signed, namely: between the West University of Timișoara and the University “La Sapienza” (Rome, Italy), between the “Ovidius” University (Constanța) and the University of Granada (Spain) and between the West University of Timișoara and the University of Santiago de

Compostela (Spain). These agreements continue to offer an interchange of professors and students of the above mentioned universities, the main beneficiaries being the young Romanian geometers having special abilities for scientific research. After the second workshop (Constanța, 1995), the “Ovidius” University of Constanța developed (and is still developing) a strong mathematical cooperation with IMAR: members of IMAR have given courses in Constanța, and some of them hold part-time positions at “Ovidius” University.

It is worth mentioning here that these workshops were attended by almost all Romanian geometers of international level from Bucharest, Braşov, Cluj-Napoca, Constanța, Iași and Timișoara, and also that the invited lectures, as well as some communications, were published in special volumes, which was - again - for the benefit of young Romanian geometers (attending these meetings or not).

I think that it is important to point out that among the participants from abroad were outstanding mathematical personalities, and also brilliant Romanian mathematicians from famous universities over the world. I would like to mention here that two invited speakers at our workshop from 2007 (namely, Prof. Dr. Wend WERNER from Münster University - Germany and Prof. Dr. Dušan REPOVŠ from Ljubljana University-Slovenia) have been invited as visiting professors at IMAR. In September 2011, Prof. Dr. Nicolae ANGHEL from North Texas University-USA, which was invited speaker at our 2009 and 2011 workshops, was visiting professor at IMAR. In December 2014, Prof. Dr. Dmitri ALEKSEEVSKY from Masaryk University - Czech Republic, which was invited speaker at our 1999 and 2013 workshops, was a visiting professor at IMAR. In 2015 Prof. Dr. Remi LEANDRE from Besançon Univ. (France) was one of the invited speakers; he had obtained in 1988 the BRONZE MEDAL FOR RESEARCH from CNRS.

In 2019, the journal *Axioms* - <https://www.mdpi.com/journal/axioms> sponsored for the first time the “Best Poster Award” for young researchers. The winners were: Gabriel MACSIM and Valentin GHIȘOIU.

The libraries of the universities which have co-organized with IMAR the workshops have benefited - also as a consequence of the workshops - from book donations and some facilities concerning mathematical journals, as well as a more easy and rapid access to the mathematical information (with the help of *Zentralblatt für Mathematik*).

The first four workshops have contributed to the very good evaluation of IMAR in the competition organized by European Commission - General Directorate for Research - in the frame of the Programme “Confirming the International Role of Community Research” (Support for Centers of Excellence). Consequently, in 2000, IMAR became Center of Excellence of the European

Union for the period March 2001 - June 2004.

It is worth being mentioned here that in 2015 we organized (for the first time!) in the frame of the Workshop a round table on the teaching of geometry in secondary school. We organized this round table taking into account some proposals, as well as the present status of the study of geometry in our schools. In 2017, we extended the topic of the round table to the teaching of mathematics, and it was organized just before the workshop (in the morning of 25 September 2017).

Last but not least, we would like to point out that the series of the above mentioned workshops and seminars have stimulated other younger colleagues to organize international meetings on differential geometry and related topics at the University of Bucharest, at the University Transilvania of Braşov, at the University Politehnica of Bucharest, and at the University of Civil Engineering of Bucharest.

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