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# Professor Mladen Berković (1936-1999)

**Jovo Jarić** *

*In the book written by A.T. Filipov "Many face Soliton" (Edition. Moskva, " Science", Physics-mathematics, 1986, p.6) it is written: " ... We shall be interested mostly about the fate of ideas, but not about the fate of their authors. As Albert Einstein said, history of physics, it is drama of ideas. In this drama it is instructive to follow in succession the destiny of scientific ideas. They are more interesting then changeability of the fate of men, since each of them contains something immortal, even a fraction of truth. ... "*

In its history Physics had and still has a firm support in mechanics. That is why before all we think of mechanics when we talk about the destiny of ideas . And indeed, generally, we know little of the fate of theirs authors. Or we know only about few of them who are now symbol of scientific conviction. None scientific discipline in its development, as mechanics has such history as well as its bearer. Fighting for their ideas and scientific truths they were ready to give their lives. Let me here mention at least two of them: Giordano Bruno and Galileo Galilei. Giordano Bruno answered the sentence of death by fire with the threatening: "Perhaps you, my judges, pronounce this sentence against me with greater fear than I receive it." He was given eight more days to see whether he would repent. But it was no use. He was taken to the stake

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and as he was dying a crucifix was presented to him, but he pushed it away with fierce scorn.

Therefore, it is on us, who are engaged with mechanics, who are studying its laws and its achievements to remember and to remind on great names in the field of mechanics, on the time of their creation, the time of their life and destiny as an example and stimulation for new scientific success.

That is why today we are here attending this Conference in memory of Prof. Mladen Berković, in order to remind us on his life and contributions ( in mechanics). Inasmuch, because our remembrances are very fresh and close. I dare to omit basic date of his life, since you already know it. They are facts: time and birth place. Not because it not important, but because it does not depend on us. I am going to tell you more about his life with us, here where we were sharing the same fate, what was the way of his thinking and doing exceeding the time and space. This is what makes him different, better to say special, from the others. There are many facts which confirm it: his scientific activity in a very new field of mechanics, his communicatively, his connection with scientific community, his very broad education and knowledge about history, arts..., and over all his humanity.

Mladen Berković was a mechanical engineer by his education, and fully involved in the contemporary problems of theoretical and applied mechanics. He was the founder of the Computer Mechanics in our country and applied mathematician as well.

At the Institute of Mechanics, first he was engaged as an adjunct professor and than as its full member. Our Institute and Mladen Berković were the first at Belgrade University to introduce the course of "Computational Mechanics" as part of regular studies. This was true for the territory of former Yugoslavia as well.

The students unwillingly accepted the introduction of this course. They organized a special meeting at the Institute hoping to reverse this decision. They believed that this course belonged to the mathematics program, that they already had enough mathematics courses, and that they enrolled to study mechanics but not mathematics. The Institute was persistent in its determination to keep the course and that is how Mladen Berković was engaged. Soon after students changed their opinion regarding this subject. The first generations of the undergraduate

students even suggested that the new generations of students should have more lessons regarding the existing course, and the introduction of new classes as well. For the first time, thanks to their capability and knowledge of computers the students were able to find jobs outside of the Secondary Schools and Institutes of Science. Thanks to Mladen, the studies of Mechanics moved into a new direction.

Berković's lectures and publications are characterized by their clarity of exposition and appeal to a broad audience of applied mathematicians and mechanicians. His classroom lectures exhibit the same lucidity and precision as his scholarly presentations , as he strives to convey his wide knowledge of the subject and related applications in a way accessible to the variety of students he teaches. That is why Mladen was not only loved but also highly rated by his students.

BerkovićProf. Berkovic has served, and been recognized by, the academic community in number of way: he was a leader of our Seminar of Rheolory, established by Prof. R. Stojanović, he was a leader of scientific projects in Mechanics, he was the only one from our Faculty of Mathematics who was the lecture of the International Summer School, he was a general lecturer at our Congresses, ...

In fact, he was one of the rare and unique persons who were never bothered by contemporary course of Mechanics. He simply fit right into it. His mastery of theoretical knowledge was equally remarkable. One need only name a problem, and he would offer a direct and precise answer. For example: ones I was interested in generalized matrices as a contemporary method for solving a series of problems in mechanics. I thought it might be of interest for the wider audience. He had given me his full support, gave me some books from his library in connection with this method, and even brought me his own contributions on this subject written ten or more years ago from the period when he worked at the Institute of Aeronautics.

Mladen liked the scientific field he was engaged in and was completely dedicated to Mechanics. But he never let his profession stand before his family. This is the last thing I will forget. Some of you know we have had and still have very good cooperation with TU in Budapest. PAMM Conferences in Hungary are held three times a year. Mladen never participated. By accident I found out that he was fluent in Hungarian. I was very much excited about that, and immediately asked him to

participate at a next Conference. In September 1999 Mladen was very busy with preparations for Workshop Conference in Portugal. Both Conferences, in Portugal and Budapest, were to be held within 3 weeks. Unfortunately, he could not participate at a Budapest Conference due to family matters. He planned and wished to participate on the next Conference in Budapest. As we now know this wish of ours would never be fulfilled.

Mladen was very much concerned with the existing state and path of the development in Mechanics in our country. It seemed to me that he was right again. Learning Mechanics at the University and in Secondary Schools does not follow the desired path of development. These are the facts: The number of hours in Secondary Technical Schools has been being drastically reduced. The same trend was present at our University. What was happening in the world these days? During the talks held at the Faculty of Transportation with representatives of TU, Budapest, we were informed that their focus is on the development of basic scientific disciplines, primarily related to Mechanics. Their teaching plans and programs as well as number of hours supported this statement. At Cornell University, Department of Theoretical and Applied Mechanics exists only at a PhD level. When Mechanics is concerned such studies have only the best Universities in USA: Harvard, Princeton, Columbia, and MIT . What was happening to Mechanics at our Universities ? What was Mladen Berković's opinion on the subject? At our University we studied fundamental disciplines like : mathematics, physics, chemistry, physical chemistry, biology, geography and meteorology. Each of these disciplines has its own teaching plans and programs. Each has its own scientificInstitutes: of mathematics, several of physic, chemistry, biology... Mechanics does not have and never had the same status. Mladen believed the following: At Belgrade University we need to have Mechanics included among and equal to the abovementioned basic scientific disciplines. The time will judge that his opinion is accurate.

Mladen was an excellent associate: reliable and well-intentioned. Even more, he was a leader. It is enough to remind you of his leadership during this seminar. Mladen created the atmosphere of familiarity in which free scientific discussions could take place and where everyone could participate in discussions.

Now, I would like to repeat what I have said in my good-by speech to

Mladen: If one can freely choose to describe somebody, than for Mladen Berković one would say: "Still waters run deep". That was our Mladen: quiet, strong and consistent. Each word of his was thought out and justified. He spoke softly and slowly. He was aware that even in the most difficult situations the truth depends on facts not the loudness of the voice. With Mladen, everything was in order and harmony, starting from his thoughts to his books on the table. He was well-intentioned, natural, and above all humane, as defined by Marko Miljanov. He inspired confidence. He was there for everyone, but never talked about his own problems and difficulties. I do not know a man more dignified, respectful and respected than Mladen Berković. When Mladen moved on quietly and suddenly, he left us with immense grief and sorrow.

I have always admired Mladen for his culture and his intellect. I discussed most of my work with him and as he gave me always honest, sometimes very strong criticism. For that I am grateful. But most of all I am grateful for our friendship, a friendship that grows since we first met. That is why I consider myself to have been most fortune of men: I have had true friend.

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