

Prof. RNDr. Beloslav Riečan, DrSc.

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One of the last Spiritus Mathematicus Slovakiensis

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Dedicated to the 75th birthday of Beloslav Riečan

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On November 10, 1936, in Žilina, Slovakia, a small boy, called by his parents Belko, was born, and who for many years is known as Prof. RNDr. Beloslav Riečan, DrSc. The Fates gave him many gifts but also many stickers: being four and half his beloved mother passed away, being six his eight-year brother Horislav died, too, and in autumn 1994, his firstborn daughter Hanka, a very gifted mathematician, died in the result of a car accident at one Austria highway. Fortunately, other Fates gave him also very scarce gifts: love to Maths, love to music, and the most important gift — love to people, which helped him very deeply during his whole life — and such Belo is known by the most among us, his students, colleagues and friends.

After the mother death the family moved from Púchov to Banská Bystrica where he attended the primary school, and a very famous high school, Gymnázium of Andrej Sládkovič, which had a very great influence to the young soul of Belo. Many important personalities of the science, culture and social life of the Slovakia attended this high school. Young Riečan absorbed through all his pores a unique atmosphere of Banská Bystrica. In the persons of Š. Moyzes (catholic bishop) and K. Kuzmány (evangelical superintendent), he is discovering a fascinating possibility of the coexistence for the development of Slovakia, and from which he is able always successfully to draw, which is very significant in his full age. Belo was one of the best students, he was

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excellent in Maths and in playing piano and organ; he became even an organist in an evangelical church in Banská Bystrica (1950–53, and also now since 2001). Young students used to meet in his father's flat where they discussed with a great ignition about everything, declaimed verses, and an old duck was hearing them in still. As a student, Belo won an All-Slovakian competition for young pianists which caused him a big head ache: it was necessary to choose between a career of a pianist or of a mathematician. He preferred mathematics which have had a great influence for Slovak Maths.

In 1953, Belo is going to Bratislava, where he attended the Faculty of Natural Sciences of Comenius University. Here he had excellent teachers who belong to the first generation of the Slovak Mathematicians: Acad. Jur Hronec, Profs O. Borůvka, M. Greguš, A. Huťa, M. Kolibiar, T. Neubrunn, J. Srb, M. Sypták, T. Šalát, V. Šeda and others. His school-class was one of the best in the history; his student fellows became a decoration of the Slovak mathematical society: Profs P. Brunovský, J. Černý, A. Dávid, O. Erdélská-Klaučová, M. Franek, J. Gruska, P. Kluvánek, J. Moravčík, Z. Petrovičová-Riečanová, Z. Zalabai, etc.

During his studies he wired to scientific activity under the guidance of Prof. M. Kolibiar and immediately his first paper *On axiomatic of modular lattices*, Acta Fac. Rer. Nat. Univ. Comenianae, Math. **2** (1957), 257–262 (in Slovak), was a top hit. This paper was quoted in monographs of G. Birkhoff, L. A. Skornjakov and G. Grätzer. Every specialist of lattice theory knows very well how a great distinction for the author are such quotations in these three fundamental books. Today, when takes one's stand on CC-publications and SCI-quotations, it is wonderful how these mathematical giants could quote this paper, although it was written in Slovak and in a non-current journal.

After finishing his studies in 1958, he started to work at the Department of Mathematics of the Slovak Technical University, Bratislava. In 1962-64 he was a PhD-student of Prof. Š. Schwarz, another giant of the Slovak mathematics. In 1966 he was the Associated Prof., and he started to give lectures also at Faculty of Natural Sciences of Comenius Univ., where later he started to read lectures also to the author of these lines. In 1979 he defended the scientific degree DrSc., and in 1981 he was appointed as the University Professor. From 1972 he worked at this Faculty, and in 1985 he moved to Liptovský Mikuláš, to the Department of Mathematics of the Military Academy to come back in 1989 to Faculty of Mathematics and Physics, Bratislava, as the first willingly elected Dean. Since 1992 he was the Director of Institute of Mathematics of the Slovak Academy of Sciences, and since 1998 he is back in the city of his youth, Banská Bystrica, where since October 2001 he is at the Institute of Mathematics and Informatics, the joint institute of the Institute of Mathematics, Slovak Academy of Sciences, and the Faculty of Natural Sciences of the University of Matej Bel.

Prof. Riečan belongs to the most significant mathematicians of Slovakia. He is the author or coauthor of 7 monographs (the last one [M3] appeared in 2009) plus 2 chapters in books, 240 papers published in scientific journals, over 80 technical papers, 4 university textbooks, 30 high-school textbooks and text tools, 8 scripts plus 3 in electronic form, 8 books on mathematics (one book on probability had 6 editions), 8 tv-scripts, over 500 publicists articles.¹ His papers were quoted more than 500-times.

¹The list of his first 122 publications and the list of monographs can be found in [3]. The updated list of publications from 2005–2010 is at the end of this article.

This note is based on the article [7] where is a list of his papers [118–192]. Other articles on B. Riečan: [1, 2, 4, 5, 6].

He was a PhD-supervisor of 30 PhD-students, which is a Slovak unique, and he was a supervisor of over 55 diploma-theses. Many of his former students are nowadays leading personalities of our universities and of the Slovak Academy of Sciences. His professional activity is probability theory, measure theory and integration, fuzzy sets, and quantum structures. His activities are very large and reach even besides of Maths. He is a member of 6 international scientific societies.

Among his most important mathematical contributions we can surely insert establishing unifying theory of measure and integration in ordered spaces. He extended the notion on entropy of dynamical systems. He initiated study of quantum structures and fuzzy sets in Slovakia. He developed probability theory of fuzzy sets. That has a very important connection to probability theory on MV-algebras [Ch1]. He is very often invited to address his talks on many conferences in home as well as in abroad.

He is a tireless organizer of many scientific events; many of traditional scientific conferences in Slovakia or seminars have arose due to his direct personal stimulus. Thanks to him, in Liptovský Ján Valley an important mathematical congress centrum have appeared which is already very well entered in awareness of foreign colleagues; as a rule, a concert of conference participants is regularly organized which is always highly welcome. He was a long-standing president of the Union of Slovak Mathematicians and Physicists, he is the Head of the Slovak Association of Rome Club. As an outstanding musician and musical expert, since 1984 together with an important Slovak musician Prof. Roman Berger are guiding the Seminar Mathematics and Music, and around this seminar a circle of Slovak, Czech as well as foreign intellectuals is concerned. He is a fanatic propagator of Slovak books, namely of mathematical ones, and he is a mathematical modern version of Matej Hrebenda (M. Hrebenda, 1796–1880, was a famous blind propagator of Slovak books). When in the late 1980s, the famous Prague Vičichlo Library of the Czech Technical University announced that their old books would discard, he saved them and organized the transport of the books to Liptovský Mikuláš as well as to Institute of Mathematics, Slovak Academy of Sciences, Bratislava; for example we have an old original monograph by J.C.F. Gauss on number theory, *Disquisitiones Arithmeticae*, 1801.

On pages of daily press, on TV-screen and radio he is trying on uplift of the education in Slovakia, he is voicing to momentous questions of education, science, culture and clergy in our society, and to acute questions of collaboration between universities and Slovak Academy of Sciences. His scientific, pedagogical, organizing activity was many time awarded on many important national and international platforms. I mention only the latest ones: Honorary Medal of Bernard Bolzano of the Academy of Sciences of the Czech republic (1998), the Silver Medal of University of Milano (2000), and Medal of the Slovak Academy of Sciences for support for science (2001), Order of E. Štúr of the First Grade (2002) (the highest estimation in Slovakia for scholars awarded by the state president), member of the Learning Society of the Slovak Academy of Sciences 2005, Dr.h.c. of the Military Academy, Liptovský Mikuláš, 2006, the grants for the most successful PhD tutors.

All these outstanding scientific degrees which Prof. Riečan achieved are very important and needful, however they don't reflect the main feature of his own. And this is his interest for the man, for the pupil and student, which very often borders on self-sacrificing, and which is very typical for him. Not once I had opportunity to see him how he already as a known professor was near with a young adept of Maths. Or how he was carrying on his back the books and offering them to people. Thanks for that he induced interest for Maths in many young novices while his sparks are very

susceptible. In addition, he has a gift to put people together for the well of matters and he is not shaming to let enlighten himself by younger colleagues. I have not yet understood where he takes so much energy and so many ideas.

Dear Belo, you are a genuine and one of the last spiritus mathematicus slovakien-
s, and therefore we wish you on the occasion of your important life jubilee good health,
happiness and many new interesting mathematical results and new ideas on organizing
mathematical life.

Ad multos annos!

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