



## PROFESSOR LADISLAV SKULA IS EIGHTY

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30 June 1937 is the birthday of Professor Ladislav Skula, our colleague at the Institute of Mathematics of the BUT Faculty of Mechanical Engineering, a distinguished editorial board member of this journal, and an outstanding Brno mathematician of world renown.

With an avid interest in mathematics since his youth, after completing a secondary school in Kroměříž, he enrolled for mathematics studies at Masaryk University, graduating in 1960. Already as a student, he was helping out in linear algebra and descriptive geometry classes at his university and at Brno University of Technology. After graduation, he then stayed at these departments to teach in a wide spectrum of mathematics courses including linear algebra, general algebra, and discrete mathematics.

Supervised first by Professor Karel Koutský (1897–1964) and, after his death, by Professor Milan Sekanina (1931–1987), Ladislav Skula started his Ph.D. studies in 1963 to submit and defend the thesis, *Ordered Sets of Compactification Classes*, in 1967. In 1970, he successfully passed a viva voce for an associate professor tenure, which – due to the then political situation – he only received in 1986. For the same reason, he was conferred a doctor of sciences degree only in 1991 by Charles University in Prague. In this year, he was also granted a professor tenure at Masaryk University in Brno.

In his research, Professor Skula was mostly concerned with the theory of categories specialising in topology, algebraic theory of numbers, cyclotomic fields, and Fermat’s hypothesis. His excellent research results had soon brought him into international prominence as a mathematician with some mathematical concepts even bearing his name such as *Skula topology* and *Zaks–Skula constant*. Remarkable are also his achievements in the theory of semigroup divisors. The concepts introduced in his 1970 groundbreaking paper, *Divisionstheorie einer Halbgruppe*, were later extended by a number of mathematicians such as Geroldinger, Halter–Koch, Lettl, Močkoř, and others. The theory of numbers, particularly cyclotomic fields and Fermat’s hypothesis, as well as the study of Stickelberger’s ideal received much of Ladislav Skula’s research potential. In his paper, *Another Proof of Iwasawa’s Class Number Formula* published in 1981, he gave an elegant proof of the Iwasawa formula for the index of Stickelgruber’s ideal. One facet of Ladislav Skula’s spectrum of interests is also formed by the elementary number theory. He has published several papers on Zám’s problem, Fermat and Wilson quotients of composite modules, and algorithms similar to fast Fourier transform. Recently, Professor Skula has been concerned with the study of involutions on the matrix

algebra, categorical approach to the theory of divisors, theory of Fermat's quotient, algebraic theory in discrete linear control, factorization of a cubic polynomial, tribonacci sequences, orders of imaginary quadratic fields, theory of the greatest common divisor in rings, etc. He has published his remarkable results in over 85 papers. Although he is the sole author of most of them, he has also cooperated with ten co-authors such as Takashi Agoh from Japan and Karl Dilcher from Canada. He has been awarded a Silver Medal of Masaryk University in Brno.



Professor Skula talking at the algebraic seminar held at the Institute.

Apart from being a renowned mathematician, Ladislav Skula is also a precise and painstaking teacher, nice and obliging person, who can create a comfortable and congenial atmosphere having the audience imbibe his enthusiasm. He was much liked by the mathematical-engineering students at the BUT Faculty of Mechanical Engineering where he taught general and linear algebra, and discrete mathematics for several years. His seminar lectures, too, enjoy much popularity, recently focusing on the relationships between the Wieferich and Mersenne primes.

In his leisure, Professor Skula likes playing chess at a fairly high level. He is well-read, particularly in history. Meeting him always brings some inspiration and piece of wisdom. We wish him good health, peace of mind, and boundless enthusiasm about mathematics, in which he has been so successful.