IN MEMORIAM PROF. VOJTĚCH JARNÍK
(22. 12. 1897 – 22. 9. 1970)

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On March 16, 1998 the Czech mathematical community commemorated the centenary of the birthday of Prof. Vojtěch Jarník. The commemorative meeting was organized by the Faculty of Mathematics and Physics of Charles University together with the Union of Czech Mathematicians and Physicists and the Mathematical Institute of Academy of Sciences of Czech Republic. A welcoming address was delivered

by the Dean of the Faculty Prof. Bedřich Sedlák, further speakers being Prof. Ivan Netuka (life and work of V. Jarník), Prof. Jaroslav Kurzweil (diophantine approximations), Prof. Břetislav Novák (analytical number theory, geometry of numbers), Prof. Jaroslav Nešetřil (graph theory), Assoc. Prof. Luděk Zajíček (theory of real functions) and Assoc. Prof. Jiří Veselý (educational activities). In the conclusion several participants presented briefly their recollections of V. Jarník.

Prof. V. Jarník influenced by both his scientific work and teacher's activities several generations of Czech and Slovak mathematicians. He was probably the first Czechoslovak mathematician whose scientific works received wide and lasting international response and have been cited till now. The personality of Prof. Jarník represents a link between the classical and the modern mathematics. He was a real expert in traditional fields of mathematical analysis and simultaneously one of the first Czechoslovak mathematicians to master the set theory, topology, theory of measure and integral. He was known as a lecturer par excellence and was without doubt one of the best teachers at Charles University in the twentieth century.

V. Jarník studied mathematics and physics in the years 1915–1919 at Faculty of Humanities (Philosophical Faculty) of Charles University. The degree RNDr. he received at the then newly founded Faculty of Science of Charles University in 1921 on the basis of his thesis "On the roots of Bessel functions". During his studies as well as later on V. Jarník was influenced by his teacher Karel Petr, Professor of Charles University during 1909–1938. In 1919–1921 Jarník was Assistant Professor at Technical University in Brno. His exceptional mathematical erudition was first demonstrated already in his paper On Bolzano's function (1922) in which he examined in detail the just discovered manuscript of Bernard Bolzano from the thirties of the 19th century. V. Jarník proved among other that Bolzano's function is in fact the oldest example of a continuous nowhere differentiable function. In the years 1923–1925 and 1927–1929 Jarník realized two visits to Göttingen, then a most important centre of European mathematical life. During the twenties this was the place of work for Professors D. Hilbert, R. Courant, E. Landau, C. Runge, G. Herglotz, P. Bernays, E. Noether and O. Neugebauer. Jarník was apparently influenced most by Edmund Landau, an outstanding specialist in mathematical analysis and number theory. After his return from the first visit Jarník defended in 1925 his habilitation thesis (devoted to lattice points). The first course lectured by V. Jarník as Associated Professor (Dozent) after his habilitation concerned the Lebesgue integral (the lecture notes of the course have unfortunately not been found). In 1929 V. Jarník was appointed Professor Extraordinary of Charles University, in 1934 he becomes member extraordinary (and in 1946 regular member) of Czech Academy of Sciences and Arts and in 1935 is appointed full Professor of Charles University. (At that time professors were K. Petr and B. Bydžovský, M. Kössler and E. Schönbaum, those appointed later but before 1950 were V. Hlavatý, V. Kořínek and E. Čech. Besides, F. J. Studnička, E. Weyr, J. Sobotka and V. Láska were professors at Charles University after 1900 and before 1935.)

In 1931 V. Jarník published in Petr's book Integral Calculus as an appendix the very first Czech text on (naive) set theory. Of great importance is Jarník's critical review of the work Funktionenlehre which was discovered in Bolzano's inheritance and published with a hundred-year delay. For Čech's book Point Sets Jarník wrote an appendix "On derived numbers of functions of one variable", in which he summarized his then new results on differentiability of typical continuous functions. In the late thirties Jarník started publishing his books on differential and integral calculus. These textbooks of monographical character influenced generations of Czech and Slovak mathematicians. The four-volume work was concluded in 1955 by publishing Integral Calculus II.

In the years 1935–1950 V. Jarník was Chief Editor of the mathematical part of Journal for Cultivation of Mathematics and Physics, and he succeeded in raising the journal to international level. For extraordinary scientific results V. Jarník was awarded State Prize in 1952.

Professor Jarník held numerous offices at Charles University. In 1947–1948 he was Dean of the Faculty of Sciences of Charles University, 1948–1949 Vice-Dean of the same Faculty and 1950–1953 Vice-Rector of Charles University. In 1952 he was among the founding members of Czechoslovak Academy of Sciences, 1952–1955 chairman of its Mathematical-Physical Section and 1964–1966 Chairman of the Scientific Board for Mathematics of the Academy. V. Jarník ended his active career at the University in 1968.

In the conclusion let us briefly mention the scientific papers of V. Jarník. Their list includes 90 items, almost a third of which is devoted to problems of lattice points, another third to diophantine approximations and geometry of numbers, about twenty papers concern the theory of real functions. During the twenties Jarník published 31 papers, in the subsequent decades 38, 12, 6 and 3, respectively. The complete list of publications of V. Jarník is available in Czechoslovak Math. J. 21 (1971), 520–524 or in Časopis Pěst. Mat. 96 (1971), 332–337.

The commemorative meeting has again demonstrated how essentially Jarník's contribution influenced mathematical analysis, number theory as well as some other branches of mathematics. It has also shown the depth of roots of Jarník's legacy as a teacher, which is present under the name of Jarník's style even thirty years after Jarník's retirement from active teaching.