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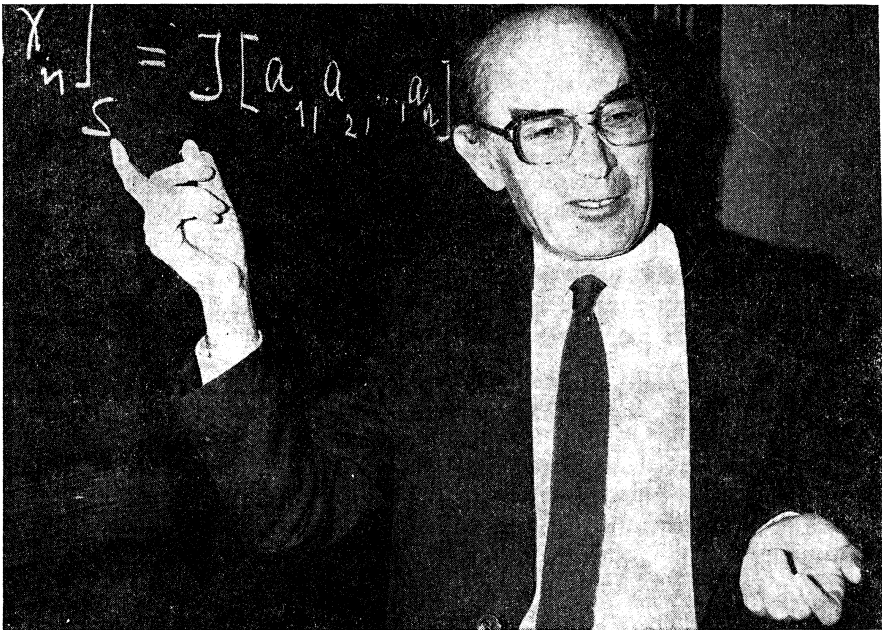
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NEWS AND NOTICES

SIXTY YEARS OF PROFESSOR KAREL DRBOHLAV

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The sixtieth anniversary of birthday of Professor RNDr. Karel Drbohlav, DrSc. came as a surprise to many of his friends and colleagues, who get used to number him among the middle generation of Czechoslovak mathematicians.



The whole life of Karel Drbohlav has been tied up with Prague, where he was born on March 20, 1927 as a son of a physician. In 1946 he started his studies at the Faculty of Science of Charles University. He was one of the first students who chose to specialize in Mathematics, while the majority preferred to study both Mathematics and Physics which qualified the graduates to teach these subjects at secondary schools. After four years of studies K. Drbohlav became Assistant Professor at Department

of Mathematics of the Faculty, and after completing his studies in 1952 and receiving his RNDr. (Doctor of Natural Science) degree he became member of the Faculty. Since then, the whole career of K. Drbohlav is tied up with the Faculty of Mathematics and Physics which in 1952 separated from the Faculty of Science.

In 1966, K. Drbohlav received his Doctor of Science (DrSc.) degree in a rather exceptional way: he submitted his thesis for the degree of Candidate of Science, but due to its outstanding standard, the Committee decided to grant him the higher scientific degree. In 1967, Drbohlav was appointed Associated Professor (Dozent) and in 1977 Full Professor of Mathematics.

It is not difficult to trace down two principal facts which had decisive influence on the forming of Drbohlav's personality. First of all, it was the presence of a numerous group of outstanding mathematicians at the University who educated the whole after-war generation of Czechoslovak mathematicians. It would be possible to mention many names, but K. Drbohlav considers himself a pupil of Professors V. Kořínek, V. Jarník and E. Čech. From V. Kořínek he took over the devotion for modern algebra, V. Jarník was his paragon in pedagogical mastery and tactful approach to students, and in E. Čech he admired both the extraordinary width and depth of mathematical knowledge. On the other hand, the after-war period in which Drbohlav decided about his future professional career was a period of deep social changes, including the revival and new progress of Czechoslovak Mathematics. This progress concerned not only the scope of mathematical research in itself but also the social status of Mathematics in the country. Prof. Drbohlav took an active part in implementing positive changes, helping with foresight and ingenuity to develop the research in algebra. He strove for a wider scope of algebraic research as well as for its more effective influence on the development of Mathematics as an organic entity. This aim determined the main direction of his work as researcher, teacher and organizer.

What was said above enables us to understand why Prof. Drbohlav's interest has been concentrated first of all on general algebraic problems leading to a synthesis of special theories, to their simplification or translation to other situations. His theory of congruences on commutative semigroups [10], [11], [12] represents above all a proof of possibility of transferring the Noetherian theory of ideals from rings to commutative semigroups, and is of fundamental significance for the study of these structures. An important tool for implementing his ideas of synthesis was found by K. Drbohlav in the category theory. He is the author of one of the first constructions of a non-concrete category [8], a simple construction independent of the Axiom of Choice. He established the categorial variant of Birkhoff's theorem on varieties of algebras [13], which he used to lay the foundations for the study of algebras in the category dual to the category of sets [14], [16]. His algebras are also close to automata. When studying tolerance spaces he looked for a method of modelling the structure of continuity on algebras by discrete means [17], [18], [19]. Here he paid special attention to groups of automorphisms of semigroups or n -semigroups and their

fixed points. In his theorem on representation of multialgebras by tolerance algebras [18] he found the connection between the two kinds of algebraic structures.

Results motivated by practical problems have a special place in Drbohlav's research. He is the author of a mathematical model of rock milieu, which he created in the framework of his long-lasting research motivated by the needs of mining engineers. We should also mention the fact that he proposed a new and advantageous algorithm for the solution of the transport problem [3], [7]; he did so at the time when the operational research in Czechoslovakia only started to develop.

Nevertheless, all who know Prof. Drbohlav realize the fact that he considers his work as a University teacher the centre of his creative activity. To this end he has never spared time and energy, and the results achieved have always been commensurable with his extraordinary talent for this kind of work. He has systematically varied the syllabi of his advanced lectures in order to provide the students with an opportunity of getting acquainted with versatile and well-balanced material. But also his elementary courses have brought many new and original points in the organization of proofs as well as in the general conception and methodology. Recently, he has devoted a considerable part of his efforts to the education of future secondary school teachers.

Our account of Prof. Drbohlav's personality and his activities would not be complete without mentioning his part in the organization of research and education. Let us first recall that after the retirement of Academician Kořínek he became Head of the Department (1970–1975), and at the same time he held for three years the very demanding office of Vice-Dean of the Faculty. We should also mention a number of offices he has held in committees for scientific degrees, boards of national research projects etc. Since 1978 he has been chairman of the Prague regional committee of the Mathematical Olympiad; his meritorious activity included the organization of the 25th International Mathematical Olympiad in Prague in 1984. Many institutions rewarded him for his merits by memorial medals and other distinctions; let us only mention the 1st degree medal of the Faculty of Mathematics and Physics of Charles University. However, for him the greatest reward is the respect and appreciation he receives from his colleagues, friends and students not only as a teacher and scientist but as a humble, honest and extremely friendly man.

On the occasion of the sixtieth anniversary of his birthday, Czechoslovak mathematical community extends to Professor Karel Drbohlav their sincere wishes of firm health, unceasing zeal in his work, and satisfaction and harmony in his personal life.

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- [20] Associativity semihypergroups and related problems, *Atti del Convegno su Ipergruppi, altre strutture multiveche e loro applicazioni*, Udine 1985, 75–86, (with *T. Kepka, P. Němec*).