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NEWS AND NOTICES

VÁCLAV KOUTNÍK 1934–1994

ROMAN FRIČ and DARRELL C. KENT

Shortly after his sixtieth birthday, on June 22, 1994, our friend and colleague, Dr. Václav Koutník, CSc., died of an unexpected and treacherous illness. Following the wishes of his family, no official funeral services was held. His eulogy instead has been eloquently inscribed on the minds and hearts of his fellow mathematicians, both in his home country and abroad. They remember with gratitude his 30 year affiliation with the Mathematical Institute of the Czechoslovak Academy of Sciences in Prague, his scientific achievements, and his organization skills with which he generously served the mathematical community. He is remembered as a true gentleman, a man of integrity with broad cultural and social interests, known to be reliable and conscientious in everything he did.

Václav Koutník was born June 3, 1934 in Prague. He graduated from Charles University in Prague, specializing in probability and statistics. He received his advanced degree from the Czechoslovak Academy of Sciences under the tutelage of Professor Josef Novák. Although he worked for many years in the Department of Probability and Statistics and published two statistical papers, his primary achievements were in the area of general topology. His interest and expertise in topology and many of his research ideas were the result of his extensive involvement in Professor Novák's seminar devoted to topological and algebraic methods in probability and statistics.

Dr. Koutník published 24 original papers which were cited in over 80 papers of other mathematicians. Let us recall briefly some of his results. He solved the problem of characterizing the convergence of sequences in closure and in topological spaces (solely in terms of convergence of sequences). The roots of the problem reach to the beginning of topology and names like M. Fréchet, P. Urysohn and F. Hausdorff. In the case of unique limits these convergences are characterized by Urysohn's axiom. For multivalued limits the problem resisted solution for a long time and Koutník's solution was a bit surprising. Another fundamental result is the description of the relationship between the Čech-Stone compactification and the sequential envelope. Many of his results are related to the completion of sequential convergence groups and

rings. For example, he obtained a necessary and sufficient condition for the categorical completion of a Fréchet group to be Fréchet and constructed important examples and counterexamples. These and other his results gained him an international reputation in the mathematical community. Besides the citations and invitations, this is also reflected in his rich working contacts and correspondence.

V. Koutník was also a tireless and extremely efficient organizer. The continuing success of every Prague Topological Symposium was largely his achievement. Although he remained in the background, he did the major part of administrative work in the organizing committees. He contributed equally to many other mathematical events, and worked diligently in the Czechoslovak Union of Mathematicians and Physicists and the Scientific Council of Mathematical Institute. Enormous loss has been created by his departure.

Because of his international stature in the area of convergence theory, Dr. Koutník had been named to the Honorary Scientific Committee for the International Conference of Convergence held in September, 1994 in Dijon, France. He had eagerly anticipated attending this event, but, sadly, his sudden death intervened. He was commemorated at this conference, and his loss was sorely felt by all the participants. Those who do research in convergence theory will fondly remember Václav as they continue to build on the mathematical foundation that he helped establish.

List of publications of Václav Koutník

A. Research papers:

[1] On convergence topologies. General Topology and its Relations to Modern Analysis and Algebra II (Proc. Second Prague Topological Sympos., 1966). Academia, Praha 1967, 226–228.

[2] On sequentially regular convergence spaces. Czechoslovak Math. J. 17 (92) (1967), 232–247.

[3] Sequential envelopes and completeness. Contributions to Extension Theory of Topological Structures (Proc. Sympos., Berlin 1967). Deutsche Verlag Wiss., Berlin 1969, 141–143.

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[5] Convergence in T_1-closure spaces. Notices of the Amer. Math. Soc. 17 (1970), 410.

[6] On some convergence closures generated by functions. General Topology and its Relations to Modern Analysis and Algebra III (Proc. Third Prague Topological Sympos., 1971). Academia, Praha 1972, 249–252.

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[8] Sequentially complete spaces. General Topology and its Relations to Modern Analysis and Algebra IV (Proc. Fourth Prague Topological Sympos., 1976). Part B Contributed Papers. Society of Czechoslovak Mathematicians and Physicists, Prague 1977, 127–131. (With R. Frič.)

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[15] Completeness of sequential convergence groups. Studia Math. 77 (1984), 455–464.

[16] Recent development in sequential convergence. Convergence Structures and Appl. II, Proc. Conf. Schwerin 1983. Abh. Akad. Wiss. DDR, Abt. Math.-Naturwiss.-Technik, 1984, Nr. 2N. Akademie-Verlag Berlin 1984, 37–46. (With R. Frič.)

[17] Closure and topological sequential convergence. Convergence Structures 1984 (Proc. Conf. on Convergence, Bechyně 1984). Akademie-Verlag, Mathematical Research 24, Berlin 1985, 199–204.

[18] Problém komunalit. Sborník kursu faktorové analýzy Fatima Benešova Hora 1985. Praha 1986, 1VK–10VK.

[19] Completions of convergence groups. General Topology and its Relations to Modern Analysis and Algebra VI (Proc. Sixth Prague Topological Sympos., 1986). Heldermann Verlag Berlin 1988, 187–201. (With R. Frič.)

[20] Completions for subcategories of convergence rings. Categorical Topology and its Relations to Analysis, Algebra and Combinatorics. World Scientific Publishing Co. Pte. Ltd., Singapore 1989, 195–207. (With R. Frič.)

[21] On completion of Abelian L_0-groups. Generalized Functions and Convergence (Proc. Conf. Katowice 1988). World Scientific Publishing Co. Pte. Ltd., Singapore (1990), 335–341.

[22] Sequential convergence: iteration, extension, completion, enlargement, Quaderni Matematici, II. serie, n. 272, 1992, Universitá di Trieste, 1–19. (With R. Frič.)

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[24] Sequential groups, k-groups and other categories of continuous algebra. Coll. Math. Soc. János Bolyai 55 Topology, Pécs (Hungary) 1989 Elsevier Scientific Publishers, Amsterdam 1993, 223–232. (With R. Frič and M. Hušek.)

B. Other papers:

[1] 60 let akademika Josefa Nováka. Časopis Pěst. Mat. 90 (1965), 236–246. (With O. Fischer, J. Hájek, M. Novotný and M. Sekanina).

[2] Akademik Josef Novák sedmdesátiletý. Pokroky Mat. Fys. Astronom. 20 (1975), 61–65. (With M. Hušek.)

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[5] Eduard Čech. Pokroky Mat. Fys. Astronom. 38 (1993), 185–191. (With B. Balcar and P. Simon.)

[6] Eduard Čech, 1893–1960. Math. Slovaca 43 (1993), 381–392. (With B. Balcar and P. Simon.)

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