Jiří Adámek
A farewell to Jan Reiterman

ZPRÁVY

A FAREWELL TO JAN REITERMAN

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On September 14, we lost an outstanding mathematician, an excellent teacher, and a dear friend Jan Reiterman. He died of lung cancer after eight months of struggle. Jan Reiterman was born on October 8, 1948 in Prague. He finished elementary school in 1963, and after graduating with honours from high school in 1966, he continued at the Faculty of Mathematics and Physics of Charles University Prague in the years 1966–1971. He was a brilliant student, and his first three papers [1], [2], [6] were written during his studies. He was an active member of the Seminar of General Mathematical Structures led by Prof. Věra Trnková from 1969 until his death, and he contributed very much to (and benefited from) the creative atmosphere of this seminar. He graduated from Charles University with honours in 1971, and he continued as a PhD student of Prof. Trnková, after a one-year military service, in 1972. During his PhD studies he went on with his research of properties of functors and their applications in algebra within the seminar of Prof. Trnková, and he was an active member of the Seminar on Uniform Spaces of Dr. Zdeněk Frolík. He finished his PhD studies in 1974 by submitting a highly original thesis devoted to iterative constructions of functor structures in algebra. This thesis later became the basis of a very substantial joint paper of Jan Reiterman and Václav Koubek [19] whose importance was fully realized e.g. by Max Kelly in his survey article on iterative constructions.

In 1974 Jan Reiterman took the position of Assistant Professor at the Department of Mathematics of the Faculty for Nuclear and Physical Engineering of the Czech Technical University in Prague. Here he first held tutorials in calculus, later he held lectures on Mathematical Analysis, Theory of Games, and Analysis of Algorithms. He was considered as an exceptionally good teacher, and his personality made a major impact on the development of his department. In spite of this, and in spite of his recognition as an excellent mathematician by the international community, he was not raised to the position of Associated Professor until 1990. In 1991, Jan

Reiterman and myself obtained a research grant of the rector of the Czech Technical University on the topic „Categorical and Algebraic Methods of Computer Science" (which was later prolonged to 1992), and a TEMPUS JEP grant on the same topic.

Jan Reiterman published 60 research articles in international mathematical journals, he was a co-author of a textbook on general topology (in Czech) and an author of lecture notes on analysis of algorithms. Since his research results were becoming recognized worldwide, he was invited to a number of conferences and lecture visits to a numerous countries, and thus he was able to travel in spite of all the restrictions: he participated at conferences in Germany, Italy and in Belgium, and he was a guest researcher for one-month period at the University of L'Aquila (Italy), the University of Bremen and Hagen (Germany), the York University (Toronto, Canada) and the McMaster University (Hamilton, Canada). He was a regular participant of Winter Schools of Dr. Frolík and he took part on the conferences TOPOSYM and TOPCAT in Prague.

The main research interest of Jan Reiterman was application of categorical methods in algebra. I have mentioned his paper [19] already, another very substantial paper is [29] where the Birkhoff Variety Theorem is generalized to varieties of finite algebras: here Jan Reiterman proved that a characterization can be obtained for finite algebras if we consider equations not between pairs of terms, but rather pairs of implicit operations. In a series of papers [28], [33], [38], [42], [47], [56] we investigated, in joint research with Evelyn Nelson and other co-authors, continuous algebras. These are ordered algebras which have specified types of joins and whose operations preserves those types of joins. The topic originates from computer science, and we developed a systematic theory of constructions, varieties, and logics of continuous algebras. (I realize with a shock that of the four authors of [47] of about the same age, I am the only survivor: cancer has deprived us of the other three!) Somewhat related is the topic of dynamic algebras to which Jan Reiterman and Věra Trnková devoted several papers [24], [27], [39].

Another important theme of interest of Jan Reiterman was general (and categorical) topology. In a series of papers with several co-authors he characterized uniform atoms, i.e., uniform spaces with the property that the only strictly finer uniformity is the discrete one, see [10], [14], [17], [25], [43]. He achieved basic development in the theory of topological categories, in particular, in descriptions of cartesian closed topological hulls of a number of interesting categories [22], [31], [37], [40], [51], [52], [58].

We have by far not exhausted the list of topics on which Jan Reiterman published original articles—these include also graph theory, embedding theorems for categories, theory of descent maps, and others. Jan Reiterman was a very active and original mathematician, and his work was virtually interrupted by his death—his last papers

were completed this September, and he was then also preparing a new lecture he hoped to hold.

Besides his qualities as a teacher and a scientist, Jan Reiterman was widely known as a pleasant and helpful person, someone whom you wished to meet and to be with— and someone whom we will truly miss.

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