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Seventieth Birthday of Prof. Ing. Vladimír Strejc, DrSc.

Corresponding Member of the Czechoslovak Academy of Sciences

Vladimír Strejc, an outstanding control scientist and engineer, has attained the age of seventy this year.

Vladimír Strejc was born on January 4, 1921 in Prague. He graduated from a high school in 1939 end entered the Czech Technical University, Prague for studies in mechanical engineering. With the outbreak of World War II the Czech universities were closed and he spent several years in the industry as a designer of air-conditioning systems. The problems of air temperature and humidity control aroused his interests in control engineering and science and, in fact, had determined his career.

When the universities were re-open in 1945 he completed his studies and received the Ing. degree in 1946. He then worked for about 10 years as a designer of control systems in the power and chemical industries. During the period he wrote his first book and a series of research papers. In 1953 he began his part-time teaching at the Czech Technical University. His work had had a profound effect on education at this University and resulted in the introduction of automatic control as a separate subject at the Faculty of Electrical Engineering.

Since 1956 Vladimír Strejc has been working in the Czechoslovak Academy of Sciences. He headed a research team in the Laboratory for Automation and Telemechanics and then in the Institute of Information Theory and Automation in Prague. In 1958 he received the CSc. degree in automatic control from the Academy for his thesis on system identification and in 1963 the DrSc. degree, this time for his contributions to the direct digital control of industrial processes. In 1964 he was appointed Professor of Technical Cybernetics at the Czech Technical University, where he continued part-time teaching till 1988. In 1981 he was elected a Corresponding Member of the Czechoslovak Academy of Sciences.

Professor Strejc published more than 50 research papers in leading journals of the field, and 30 monographs, textbooks and lecture notes. Some of the books were translated into two or three languages and some of his papers were cited repeatedly and found followers throughout the world. The total number of his works approaches 150.

The research interests of Professor Strejc centered on the analysis and synthesis of continuous-time and discrete-time linear systems. He was the first in Czechoslovakia to develop a synthesis of computer-controlled linear systems. The progress of computer science shifted his interest to the numerical aspects of dynamic system identification, his ultimate goal being the advancement of control theory in the engineering practice.

Professor Strejc has served in many capacities. During 1965—1982 he was a member of the editorial board of Kybernetika and then, during 1978—1990, of Problems of Control and Information Theory. The research group at the Institute of Information Theory and Automation, which he was heading for almost 30 years, has obtained outstanding scientific results that are recognized worldwide.

He is one of the experts who signed a declaration in favour of founding the International Federation of Automatic Control (IFAC) in Heidelberg in 1956. Ever since then he has served IFAC in many capacities, participated in many of its technical events as a lecturer or as a member of international program committees. He organized the first two IFAC Symposia on Identification and System Parameter Estimation in Prague, thus founding a tradition which extends from 1967 to date.

For his contributions Professor Strejc is recognized as a great pioneer of automatic control in Czechoslovakia. At the occasion of his birthday we wish him many happy returns of the day and every success in his professional and personal activities. *Vladimír Kučera*

International Symposium of Fuzzy Approach to Reasoning and Decision-Making

Bechyně, June 25—29, 1990

The Symposium was organized in the year of the 25th anniversary of the L. A. Zadeh's seminal paper on fuzzy sets to remember this important event and to display the development and wide applicability of fuzzy set theory.

The meeting was organized by the Mining Institute of the Czechoslovak Academy of Sciences, Ostrava, as the main organizing institution, and by the IEEE Computer Society, Institute of Information Theory and Automation of the Czechoslovak Academy of Science, Prague, and the Research Institute for Regions and Macroeconomy, Ostrava, as co-organizers. It was sponsored by the Faculty of Engineering of the Technical University, Brno, the International Fuzzy System Association and the North American Fuzzy Information Processing Society, and supported by the Society of Czechoslovak Mathematicians and Physicists, Czechoslovak Cybernetic Society and the Technical University of Liptovský Mikuláš (Department of Mathematics).

The impressive list of organizing and supporting institutions quite corresponds to the participation at the Symposium. There were 81 participants and 8 accompanying persons from 21 countries (Austria, Belgium, Bulgaria, Canada, Czechoslovakia, Federal Republic of Germany, German Democratic Republic, France, Greece, Hungary, Israel, India, Ireland, Japan, Poland, China, Finland, Soviet Union, Tunisia, United States and Yugoslavia) in Bechyně. The optimistic political atmosphere and significant liberalization of the contemporary life in Czechoslovakia simplified the participation formalities for all the specialists, even those from formerly unattainable countries.

The scientific level of the communications presented at the Symposium reflected the high professional qualities of the participants and offered a representative survey over the contemporary stage of fuzzy set theory research.

There were 10 invited lectures and 50 short contributions presented with the Symposium programme. The invited papers concerned the following subjects:

James C. Bezdek (Pensacola): Clustering in Banach Spaces
Didier Dubois (Toulouse): Fuzzy Sets in Approximate Reasoning (coauthor Henri Prade)
Janusz Kacprzyk (Warsaw): Fuzzy Logic With Linguistic Quantifiers in Inductive Learning
   (coauthor Cezary Iwanski)
George J. Klir (Binghamton): Multimodel Representation and Management of Uncertainty
Vilém Novák (Ostrava): On the Logical Basis of Approximate Reasoning
Jaroslav Ramík (Ostrava): Vaguely Interrelated Coefficients in Linear Programming as Bicriterial
   Optimization Problem.
Beloslav Riečan (Bratislava): On a Fuzzy Approach to Quantum Mechanics
Marc Roubens (Liege): Bayesian and Possibilistic Production Rules in Syllogistic Reasoning
Takeshi Yamakawa (Iizuka): A Fuzzy Chip for High-Speed Approximate Reasoning
Milan Zelený (New York): A New Approach to Cognition Theory and Fuzzy Sets.

The contributions were divided into six subject areas suggested by the organizers, namely: *Logic and approximate rules of inference, Optimal control methods, Artificial intelligence, Expert systems, Optimization and decision-making procedures and Mathematical programming*. Simultaneously to those subject areas, professor George J. Klir had organized a parallel section on *Models of Uncertainty*. The usual lobby discussions were completed by an evening panel discussion on the contemporary state and perspective of the fuzzy set research in the participants' countries.

Thanks to the support of the Technical University of Liptovský Mikuláš, it was possible to prepare the booklet of abstracts mailed before the Symposium. It contains 67 items, and can be

obtained in a limited number of copies from the main organizer (Mining Institute of the Czecho-slovak Academy of Sciences, Studentská 1768, 708 00 Ostrava, Czechoslovakia). The Organizing and Programme Committee of the Symposium intends to publish a book of invited and/or fundamental contributions, and to prepare the publication of brief texts of others selected communications probably as a Supplement of this journal.

The pleasant milieu of the castle of Bechyně where the Symposium was held, as well as nice weather and friendly atmosphere created by all the participants, contributed also to a good social effect of the Symposium. The scientific programme was completed by a whole-day trip accros South Bohemia and by an amiable concert of chamber music performed by participants (Vilém Novák, Beloslav Riečan, Jaroslav Ramík, Zdeněk Karpíšek and Miloš Vítek) in the music chamber of the castle.

The Symposium on Fuzzy Approach to Reasoning and Decision-Making, Bechyně 1990, was a successful reminder of the anniversary of fuzzy set theory, and it has satisfied the expect-ance of both, participants and organizers, forming the face of this international scientific meeting. The organizers, being encouraged by the positive acceptance of their work by the participants, consider the possibility to prepare a similar symposium a few years after.

Vilém Novák, Milan Mareš, Jiří Nekola

Second World Congress of the Bernoulli Society

Together with the 53rd Annual Meeting of the Institute of Mathematical Statistics, the 2nd World Congress took place at Uppsala, Sweden, from 13 to 18 August, 1990. The congress was organized by the Uppsala University, the oldest university in Scandinavia, and successfully supported by a number of sponsors.

A number of distinguished scientists presented their research and survey lectures of theoretical and applied nature. In addition to 36 invited paper sessions, the contributed paper sessions covered further 18 topics. Sir David R. Cox devoted his invited serial Wald Memorial Lectures to some aspects of parametric statistical inference. A broad review of the matter was given, the problems arising in applications were discussed. Prof. C. J. Stone recapitulated the techniques of modelling the functions by means of B-splines and gave the outline of some relevant new results. Image analysis, asymptotic methods, likelihood inference, counting processes and survival analysis, Bayes methods, resampling, limit theorems, random fields — this is only a partial list of themes. It is not possible to remind them completely, the broad format of the congress in-cluded all important branches of modern probability theory and mathematical statistics.

The meeting has been accompanied by the book exhibitions of several well known publishers. Free copies of some journals were available. The development of statistical techniques is connected with advances in appropriate software. Current and future state of data analysis and graphics was discussed at the sessions devoted to computative statistics. There were small software exhibitions during the conference. IMSL, Interquatro from Moscow and Wolfram Research Ltd (U.K.) took a part in demonstrations of mathematical and statistical programs.

All participants are deeply indebted to the joint Programme Committee (Chairman: Prof. A. F. M. Smith) and Swedish National Organizing Committee (Prof. P. Jagers). They have done a nice work to ensure not only friendly environment for the sessions and discussions, but also rich cultural programme (and good weather). The main ideas of the contributions have been summarized into the booklet of abstracts. The Soviet Committee of the Bernoulli Society intends to publish the Proceedings in 1991.

Petr Volf

Společnost pro výzkum velkých systémů a informace

Pod tímto názvem chceme založit nevýdělečné vědecké sdružení, jehož posláním by byla podpora a popularizace výzkumu v následujících směrech:

— matematické modely mnohočásticových a mnohokomponentních systémů
— dynamika velkých systémů (vymírání, shlukování, fázové přechody)
— sebeorganizace a vytváření informace
— přenos informace ve výpočetních a komunikačních systémech
— sítě hromadné obsluhy

Máme za to, že jde o perspektivní oblast, v jejímž rámci při veškeré rozmanitosti modelů i aplikačních souvislostí (fyzika, ekonomie, ekologie, biologie, výpočetní technika, sdělovací technika) lze rozpoznat určitou pojmovou a metodickou jednotu. Právě tato jednota by měla být základem připravované společnosti. Jedním z cílů, které si společnost klade, je lepší koordinace v měřítku národním i mezinárodním, která by měla přispět k lepšímu poznání společných metodických základů a tím i k obohacení výzkumu.

Zájemce o připravovanou společnost žádáme o sdělení adresy a případných podnětů týkajících se přípravy a činnosti, a to do 28. 2. 1991.

RNDr. Martin Janžura, CSc.
RNDr, Antonín Otáhal, CSc.
Ing. Igor Vajda, DrSc.

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