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THE SIXTIETH BIRTHDAY OF PROFESSOR BEDŘICH  
PONDĚLÍČEK

MARIE DEMLOVÁ

October 24 is the birthday of one of the well known personalities in the Czechoslovak algebraic community, Professor Bedřich Pondělíček. He was born in Trutnov in Northern Bohemia. After having finished his secondary studies in Hořovice in 1950, B. Pondělíček was admitted to the Faculty of Mathematics and Physics of Charles University where he studied mathematics and descriptive geometry. After graduating in 1954 he taught at the Grammar School in Poděbrady. In 1959 he joined the Faculty of Electrical Engineering of the Czech Technical University in Poděbrady as an Assistant Professor. He was appointed Associated Professor in 1966 and Full Professor in 1981.



B. Pondělíček received the degrees of CSc. (Candidate of Sciences) in 1968, RNDr. in 1968, and DrSc. (Doctor of Sciences) in 1981. During the period of 1978–1990 he was Head of the Department of Mathematics of the Faculty of Electrical Engineering. He is a member of the Scientific Council of the faculty and a member of the Council

for Algebra of the Faculty of Mathematics and Physics of Charles University. In 1982 he was awarded the Silver Felber's Medal for his outstanding work at the Czech Technical University.

The scientific interests of B. Pondělíček range from problems concerning integro-differential equations to modern algebra, especially the theory of semigroups. Recently, he has devoted a series of papers to tolerance relations on semigroups. He has published more than 50 mathematical papers and has presented his results at a number of international conferences. He is editor of the Czechoslovak Mathematical Journal and of the Italian-Hungarian mathematical journal PUMA (Pure Mathematics and Applications).

Let us point out some of the main results of B. Pondělíček. In [4] he proved the commutative property of Archimedean ordered semigroups having some additional properties. Papers [9], [30], [31] and [32] deal with a graph associated with a semigroup  $S$  the vertices of which are subsemigroups of  $S$  and there is an edge between two subsemigroups if they are incident. Prof. Pondělíček proved e.g. that except a few cases such a graph has a diameter at most 3. Papers [11] and [14] give a representation of a linear continuous and time-independent system in the distribution theory. In the 1970's he studied and described closure operations on semigroups including the ordered ones. His results served as a motivation for other semigroup theorists. Recently he has succeeded in fully describing all varieties of semigroups whose lattice of tolerances is modular, or distributive, or boolean.

He is an excellent teacher, his lectures always are of great value to students. He has written lecture notes Linear Algebra and a textbook Algebraic Systems. He has participated in the education of many post-graduate students of a Faculty of Electrical Engineering.

On behalf of his friends, colleagues and students we extend to Bedřich Pondělíček our wishes of firm health, good humour and unceasing energy.

#### LIST OF PUBLICATIONS

- [1] Note to the problem of intersecting broken lines (Czech), Čas. pěst. mat. 83 (1958), 236–240.
- [2] On a certain group of endomorphisms on a simply ordered set I (Czech), Čas. pěst. mat. 84 (1959), 177–182.
- [3] On a certain group of endomorphisms on a simply ordered set II (Czech), Čas. pěst. mat. 85 (1960), 263–273.
- [4] Bemerkung zu einer Halbgruppe der Endomorphismen auf einer einfach geordneten Menge, Čas. pěst. mat. 85 (1960), 410–417.
- [5] On singular systems of integer-differential equations with constant coefficients and their realization by linear electric circuits (Czech), Práce ČVUT, řada III elektrotechnická, č. 5 (1965), 63–72.

- [6] On characters of chains (Czech), *Čas. pěst. mat.* *91* (1966), 1–3 (Spoluautor: O. Kowalski.).
- [7] On characters of semigroups whose idempotents form a chain (Czech), *Čas. pěst. mat.* *91* (1966), 4–7.
- [8] Note to the Richards transformation (Russian), *Acta Polytechnica — Práce ČVUT*, III *1* (1967), 27–34.
- [9] The diameter of the graph of a semigroup (Czech), *Čas. pěst. mat.* *92* (1967), 206–211.
- [10] On periodic and recurrent compact groupoids, *Čas. pěst. mat.* *93* (1968), 262–272.
- [11] A contribution to the foundations of network theory using the distribution theory, *Czechoslov. Math. J.* *19(94)* (1969), 697–710.
- [12] On a certain relation for closure operations on a semigroup. *Czechoslov. Math. J.*
- [13] Note on a certain relation for closure operations on a compact semigroup, *Czechoslov. Math. J.* *20(95)* (1970), 337–339.
- [14] Contribution to the foundations of network theory using the distribution theory, II, *Czechoslov. Math. J.* *21(96)* (1971), 35–45.
- [15] A certain equivalence on a semigroup, *Czechoslov. Math. J.* *21(96)* (1971), 109–117.
- [16] Right prime ideals and maximal right ideals in semigroups, *Mat. Čas. Slovensk. Akad. Vied* *21* (1971), 87–90.
- [17] A note on classes of regularity in semigroups, *Mat. Čas. Slovensk. Akad. Vied* *21* (1971), 312–317.
- [18] Green's relations on a compact semigroup, *Czechoslov. Math. J.* *22(97)* (1972), 69–77.
- [19] Archimedean equivalence on ordered semigroups, *Czechoslov. Math. J.* *22(97)* (1972), 210–219.
- [20] A note on an ideal quasi-order in semigroups, *Publ. Math. Debrecen* *18* (1972), 177–182.
- [21] A characterization of semilattices of left or right groups, *Czechoslov. Math. J.* *22(97)* (1972), 522–524.
- [22] A note on radicals of semigroups, *Mat. Čas. Slovensk. Akad. Vied* *23* (1973), 14–16.
- [23] A relation for closure operations on a semigroup, *Mat. Čas. Slovensk. Akad. Vied* *23* (1973), 249–256.
- [24] On weakly commutative semigroups, *Czechoslov. Math. J.* *25(100)* (1975), 20–23.
- [25] A note on Hilbert formalism of quantum mechanics, *Rep. on Math. Phys.* *8* (1975), 75–77.
- [26]  $T$ -prime subsets in semigroups. *Mat. Čas. Slovensk. Akad. Vied.*
- [27] On semigroups having regular globals, *Colloquia Math. Soc. János Bolyai* *20*. Algebraic theory of semigroups, Szeged, 1976, pp. 453–461.
- [28] The chain of right ideals in rings and semigroups, *Ann. Univ. Sci. Budapest, Sectio Math.* *20* (1977), 21, 22.
- [29] On tolerances on periodic semigroups, *Czechoslov. Math. J.* *28(103)* (1978), 647–649.
- [30] On the intersection graph of a commutative distributive groupoid, *Math. Slovaca* *29* (1979), 57–62.
- [31] The intersection graph of a simply ordered semigroup, *Semigroup Forum* *18* (1979), 229–233.
- [32] The intersection graph of an ordered commutative semigroup, *Semigroup Forum* *19* (1980), 213–218.
- [33] Relative compact elements in lattices, *Colloquia Math. Soc. János Bolyai* *33*, Szeged (1980), 667–674.
- [34] On representations of tolerance ordered commutative semigroups, *Czechoslov. Math. J.* *31(106)* (1981), 153–158.
- [35] Uniform semigroups whose proper quasi-ideals are power joined, *Semigroup Forum* *22* (1981), 331–337.

- [36] On compositional and convolutional discrete systems, *Kybernetika* 17 (1981), 277–286.
- [37] Note on a completely symmetrical semigroup, *Notes on Semigroups VII*, 1981–4, 1–4, Dept. of Math. Karl Marx Univ. of Economics, Budapest.
- [38] Atomicity of tolerance lattices of commutative semigroups, *Czechoslov. Math. J.* 33(108) (1983), 485–498.
- [39] Modularity and distributivity of tolerance lattices of commutative inverse semigroups, *Czechoslov. Math. J.* 35(110) (1985), 146–157.
- [40] Modularity and distributivity of tolerance lattices of commutative separative semigroups, *Czechoslov. Math. J.* 35(110) (1985), 333–337.
- [41] Note on quasi Hamiltonian semigroups, *Čas. pěst. mat.* 110 (1985), 356–358.
- [42] Semigroups whose proper one-sided ideals are  $t$ -archimedean, *Mat. Věstník* 37 (1985), 315–321.
- [43] Tolerance distributive and tolerance modular varieties of commutative semigroups, *Czechoslov. Math. J.* 36(11) (1986), 485–488.
- [44] On a certain class of BCK-algebras with condition (S), *Math. Japonica* 31 no. 5 (1986), 775–782.
- [45] Tolerance distributive and tolerance boolean varieties of semigroups, *Czechoslov. Math. J.* 36(111) (1986), 617–622.
- [46] Note on band decompositions of weakly exponential semigroups, *Ann. Univ. Sci. Budapest, Sectio Math* 29 (1986), 139–141.
- [47] Note on nilpotency in semigroups, *Math. Slovaca* 37 (1987), 205–208.
- [48] Note on the congruence lattice of a commutative separative semigroup, *Čas. pěst. mat.* 113 (1988), 74–79.
- [49] Commutative semigroups whose lattice of tolerances is boolean, *Czechoslov. Math. J.* 38(113) (1988), 226–230.
- [50] Principal tolerance trivial commutative semigroups, *Acta Sci. Math.* 52 (1988), 29–33.
- [51] Direct decomposability of tolerances and congruences on semigroups, *Czechoslov. Math. J.* 38(113) (1988), 701–704.
- [52] Algebras with tolerance extension property in  $O$ , *Czechoslov. Math. J.* 39(114) (1989), 142–146, (coauthor: I. Chajda).
- [53] On  $\alpha$ -ideals and generalized  $\alpha$ -ideals in semigroups, *Czechoslov. Math. J.* 39(114) (1989), 522–527, (coauthor: M. M. Miccoli).
- [54] Tolerance modular varieties of semigroups, *Czechoslov. Math. J.* 40(115) (1990), 441–452.
- [55] On varieties of regular  $*$ -semigroups, *Czechoslov. Math. J.* 42(116) (1991), 110–119.
- [56] On varieties of regular  $*$ -semigroups, II, *Czechoslov. Math. J.* 41(116) (1991), 512–517.
- [57] On permutability in semigroup varieties, *Mathematica Bohemica* 116 (1991), 396–400.