S. Koshi

Dedication

Professor Shozo Koshi celebrated his sixtieth anniversary on November 18th, 1988. This issue of the Hokkaido Mathematical Journal collects contributions from his friends and collaborators to convey their admiration to him.

Koshi was born and grew up in Otaru, a seaport city in Hokkaido, Japan. He studied mathematics in Hokkaido University. Under the influence of Professor H. Nakano, his supervisor, his researches in the first period were concentrated to the area of semi-ordered linear spaces (vector lattices) and convexity.

After a research stay in the school of famous Professor G. Köthe of West Germany from 1963 to 1965, Koshi turned his research interests to nuclear linear spaces and measures on linear topological spaces. About the same time, he moved to Okayama University. It should be mentioned that, when he later wrote a text book on measures and integrals for graduate students, a large part is devoted to the theory of nuclear linear spaces.

In 1970 he was called to the Chair of Functional Analysis of the Department of Mathematics of Hokkaido University. He has stayed in this position since then and sent out many able graduates from his school. His main area of researches in this period has been related to the structure of measures on topological groups, in connection with the famous result of F. and M. Riesz. Since 1985, he has been serving as the Dean of the Faculty of Science. Even in this hard administrative position, Koshi has been quite active in research and education. The number of his mathematical contributions has amounted to over fourty. Besides, he wrote two text books for graduates and four for beginners.

We heartily hope Professor Koshi will continue to hold his vigor and to inspire us in research.

<div align="right">

T. Ando, M. Hayashi, J. Inoue

O. Katsumata, Y. Takahashi

Y. Okabe (the Managing Editor of H. M. J.)

</div>

Mathematical Works of S. Koshi

Papers

[1] On Weierstrass-Stone's theorem. J. Math. Soc. Japan 5 (1953), 351–352.

[2] Modulars on semi-orderd linear spaces II. Approximately additive modulars. J. Fac. Sci. Hokkaido Univ. Ser. I. 13 (1957), 166–200.

[3] On some type of the modulared linear space. J. Fac. Sci. Hokkaido Univ. Ser. I. 14 (1958), 16–28.

[4] On semi-continuity of functionals. I. Proc. Japan Acad. 34 (1958), 513–517.

[5] On semi-continuity of functionals. II. Proc. Japan Acad. 35 (1959), 122–126.

[6] (with T. Shimogaki) On quasi-modular spaces. Studia Math. 21 (1961), 15–35.

[7] (with T. Shimogaki) On F-norms of quasi-modular spaces. J. Fac. Sci. Hokkaido Univ. Ser. I. 15 (1961), 202–218.

[8] A remark on Mazur-Orlicz's norm. J. Fac. Sci. Hokkaido Univ. Ser. I. 16 (1962), 221–224.

[9] Supremum of linear operators. Arch. Math. 16 (1965), 374–377.

[10] On the existence of order-continuous linear functional in quasimodular spaces. Math. Ann. 161 (1965), 95–101.

[11] (with Y. Kômura) Nuclear vector lattices. Math. Ann. 163 (1966), 105–110.

[12] A note on Montel vector lattice. Hung-Ching Chow Sixty-fifth anniversary Volume, 27–30. Math. Res. Center Nat. Taiwan Univ., Taipei, 1967.

[13] On the definition of nuclear space. (Japanese), Sugaku 19 (1967), 95–98.

[14] On additive functionals of measurable function spaces. Math. J. Okayama Univ. 13 (1968), 119–127.

[15] A note on uniform integrability. Math. J. Okayama Univ. 13 (1968), 175–182.

[16] A remark on Lyapunov-Halmos-Blackwell's convexity theorem. Math. J. Okayama Univ. 14 (1969/70), 29–33.

[17] (with O. Katsumata) Continuity of additive functionals. Math. J. Okayama Univ. 14 (1969/70), 83–86.

[18] A convergence theorem in measurable function spaces of concave type. Proc. Japan Acad. 46 (1970), 417–419.

[19] (with Yasuji Takahashi) A note on approximate dimension. Proc. Japan Acad. 47 (1971), 235–238.

[20] (with I. Amemiya) Monotone completeness and convergence theorem. Math. J. Okayama Univ. 15 (1972), 199–207.

[21] Vitali's theorem in vector lattices. J. Fac. Sci. Hokkaido Univ. Ser. I. 22 (1972), 132–136.

[22] (with Yasuji Takahashi) A remark on quasi-invariant measure. Proc. Japan Acad. 50 (1974), 428-429.

[23] Tensor Product of ordered spaces, (Japanese), Tensor products in infinite-dimensional spaces. (Proc. Sympos. Res. Inst. Math. Sci. Kyoto Univ. Kyoto 1974), Sûrikaisekikenkyusho Kôkyûroku No. 228 (1975), 75-82.

[24] (with O. Katsumata; H. Otaki) On the norm properties on function spaces. Proc. Japan Acad. 52 (1976), No. 1, 10-13.

[25] (with H. Otaki; O. Katsumata) On Szego's theorem. (Japanese), Approximation thoery in functional analysis (Proc. Sympos. Res. Inst. Math. Sci. Kyoto Univ. Kyoto 1975), Sûrikaisekikenkyusho Kôkyûroku No. 265 (1976), 38-47.

[26] On the basis problem, (Japanese), Approximation theory in functional analysis (Proc. Sympos. Res. Inst. Rath. Sci. Kyoto Univ. Kyoto 1975). Sûrikaisekikenkyusho Kôkyûroku No. 265 (1976), 115-121.

[27] An example of linear ordered vector space, Chung Yuan Jour. 6 (1977), 27-28.

[28] Vector spaces with linear order, Special issue dedicated to Władysław Orlicz on the occasion of his seventy-fifth birthday. Comment. Math. Special Issue 2 (1979), 183-187.

[29] (with H. Yamaguchi) The F. and M. Riesz theorem and group structures, Hokkaido Math. J. 8 (1979), 294-299.

[30] On F. and M Riesz Theorem, Colloquia Mathematica Soc. Janos Bolyai 35. Functions, Series, Operators Budapest (Hungary), 1980, 739-743.

[31] (with Hang-Chin Lai) The Ranges of Set Functions. Hokkaido Math. J., 10 (1981), 348-360, Special Issue.

[32] (with E. Hewitt) Orderings in locally compact Abelian groups and the Theorem of F. M. Riesz. Math. Proc. Cam. Phil. Soc., 93 (1983), 441-457.

[33] (with N. Komuro) A generalization of the Fenchel-Moreau Theorem. Proc. Japan Acad., 59 Ser. A 5 (1983), 171-181.

[34] (with Hang-Chin Lai) A metric group based on a measure space, Mathematical Structures, Bulgarian Academy of Sciences 2 (1984), 227-232.

[35] (with Hang-Chin Lai; N. Komuro) Convex programming on spaces of measurable functions. Hokkaido Math. J., 14 (1985), 75-84.

[36] On some properties of measures on LCA groups, Colloquia Mathematica Societatis János Bolyai, Alfred Haar memorial conference, Budapest (Hangary) (1985), 515-524.

[37] Convergence of convex functions and duality. Hokkaido Math. J., 14 (1985), 399-414.

[38] Convergence of convex functions and duality on finite dimensional spaces. Semmesterbericht Funktionalanalysis Tübingen 8 (1985), 69-81.

[39] Generalization of F. and M. Riesz theorems. Complex analysis and applications 85 (1985) Bulgarian Academy of Sciences, Sofia, 356-365.

[40] (with E. Hewitt ; Yuji Takahashi) The F. and M. Riesz theorem revisited. Mathematica Scandinavica, 60 (1987), 63-76.

[41] (with Yuji Takahashi) Generating subsemigroups, orders, and a theorem of Glicksberg, Hokkaido Math. J., 16 (1987), 135-144.

Books

[42] Elementary theory in probability and statistics, (Japanese), Hirokawa shoten 1963.

[43] (with K. Murata, et al.) Mathematics for general education, (Japanese), Hirokawa shoten 1968.

[44] Measure and Integration, (Japanese), Kyoritsu Shuppan 1977.

[45] Introdaction to Linear Topological Spaces, (Japanese), Saiensusha, 1977.

[46] Elements in caluculus, (Japanese), Gakujutsu-Tosho Shuppan 1979.

[47] Introduction to Mathematical statistics, (Japanese), Gakujutsu-Tosho Shuppan 1983.