

BOOK REVIEWS

THE MAZ'YA ANNIVERSARY COLLECTION BIRKÄUSER

Birkäuser Verlag gives us again the possibility to encounter the work of a major mathematician of the XXth Century. This time, Birkhäuser's collection on "Operator Theory Advances and Applications" devotes volumes 109 and 110 to honour Professor Vladimir Maz'ya on his 60th anniversary.

Vladimir Maz'ya is the autor and co-author of many publications, the topics of which extend from functional análisis, function theory and numerical análisis to partial differential equations and their broad applications.

Maz'ya provided significant contributions, among other to the theory of Sobolev Space, the capacity theory, boundary integral methods, qualitative and asymptotic methods of análisis of linear and nonlinear elliptic differential equations, the Cauchy problem for elliptic and hyperbolic equations, the theory of multipliers in spaces of differentiable functions, maximum principles for elliptic and parabolic system, and boundary value problem in domains with piecewise smooth boundaries.

V. G. Maz'ya scientific commitment and creativity has influenced both his colleagues throughout the world and his research students. He is a master of creating a School of thought, and many young mathematicians owe their graduation to him.

The first volume of "The Maz'ya Anniversary Collection", on Maz'ya work in functional analysis, partial differential equations and applications, contains a survey on his work in fields on mathematics where he made essential contributions.

Other papers of this volume have their origin in the joint work with Maz'ya. Outstanding mathematicians dedicate their paper to different contributions of Maz'ya: G. Wildenhaim, I. Gohberg, L. I. Hedberg, N. G. Kuznetsov, B. R. Vainberg, J. Elschner, J. Rossmann, V. Havin, G. Schmidt, R. Cooke, A. Grigoryan, T. Shaposhnikova, V. A. Koslov, S. Poborchi, A. Morchan, J. Aslund, A. Kozhevnikov, A. Solokiev, S. Eilertsen, G. Kresin and M. Langer.

The second volume contains a collection of articles dedicated to V.G. Maz'ya on the occasion of his 60th birthday. It contains most of the invited lectures of the Conference on Functional Analysis, Partial Differential Equation and Applications held in Rostock in September 1998 in honor of V. G. Maz'ya. Here different problems of functional analysis, potential theory, linear and nonlinear partial differential equations, theory of functions space and numerical analysis are treated. The authors, who are outstanding experts in these fields, present surveys as well as new results.

Among principal contributions to this volume figure: D. R. Adams, B. Alzyari, J. Fleckinger, P. Takác, H. Ammari, J. C. Nédélec, V. V. Chepyzhov, M. I. Vishik, E. B. Davies, E. B. Dynkin, S. E. Kuznetsov, D. Edmunds, H. Triebel, T. Ehrhardt, B. Silvermann, D. Elton, D. Vasiliev, L. E. Fraenkel, G. Hsiao, E. Schnack, W. L. Wenland, V. Kondrat'ev, M. Shubin, A. Laptev, E. Meister, A. Passow, K. Rottbrand, P. E. Ricci, Tu. Safarov, W. Sickel, I. E. Verbitsky and T. Weidl.

Both volumes were edited by Jünger Rossmann, Peter Takác and Günter Wildenhaim.

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