

R.G. *Zaripov*. **New Measures and Methods in Information Theory**.
Kazan: Kazan A.N. Tupolev State Technical University Press, 2005, 364 p.,
(in Russian)

ISBN 5-7579-0815-7

SUMMARY: This book is devoted to the newest results of the statistical theory of the information, preternatural traditional conclusions. Along with Shannon-Wiener statistical model the regular statement of models Renyi and Havrda & Charvat- Daróczy with quantum generalizations is resulted. On the basis of the new law of a composition of measures with square-law nonlinearity the group approach to a determination of the parameterized measures of the information is carried out and their general classification is reduced. For the first time essentially various four types entropies and the discrimination information dependent on one or several parameters are derived. Principles of the special theory of the information based on statistical models of new measures with geometrical representations are given.

For researchers, under- and postgraduate students learning statistical theory of information.

THE AUTHOR: Rinat G. Zaripov (b. 1947), graduated from Kazan State University in 1970. Doctor of Sciences (Phys.-Math.), Professor at Kazan A.N.Tupolev State Technical University and Kazan State University, Deputy Director and Laboratory Head of Continuum Mechanics. Institute of Mechanics & Engineering the Russian Academy of Sciences, Kazan Science Center, Russian Acad. of Sci., 2/31, Lobachevsky Str., Kazan, 420111, Russia. E-mail: zaripov@mail.knc.ru