

Methodological Foundations of the Pareto Principle. Its Implementation in Physics & Metrology

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key words

Occam's razor, random processes, complex systems, general economic laws, measuring instrument, verification

We have shown that for the majority of complex physical systems the quantitative regularity is fulfilled, characterized by the fact that the greatest amount of effect is produced by a small part of the whole possible range of resources of this system.

Any economic activity is subject to general economic laws, i.e., stable, recurring cause-effect relationships between economic processes and their results. Application of the Pareto principle as a stable economic regularity on an example of estimation of activity of metrological laboratories is an effective tool of management and interaction of modern economy.

We recommend that during verification activities in the field of measuring instruments, focus attention, time and material resources on supporting 20 % of the most productive enterprises. This will be achieved, according to the Pareto principle, the greatest efficiency in the industry – 80 % of the effectiveness.

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