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Three Approaches to Data Analysis

Test Theory, Rough Sets and Logical Analysis of Data

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► Present three famous approaches to data analysis:
► Test Theory (founded by Sergei V. Yablonskii), Rough Sets, (founded by Zdzisław I. Pawlak) and the Logical Analysis of Data (founded by Peter L. Hammer)
► Stimulates research on the relationships between the three data analysis approaches as well as the development of new methods based on a combination of the existing methods
► Written by leading experts in the field

In this book, the following three approaches to data analysis are presented:

- Test Theory, founded by Sergei V. Yablonskii (1924-1998); the first publications appeared in 1955 and 1958,

- Rough Sets, founded by Zdzisław I. Pawlak (1926-2006); the first publications appeared in 1981 and 1982,

- Logical Analysis of Data, founded by Peter L. Hammer (1936-2006); the first publications appeared in 1986 and 1988.

These three approaches have much in common, but researchers active in one of these areas often have a limited knowledge about the results and methods developed in the other two. On the other hand, each of the approaches shows some originality and we believe that the exchange of knowledge can stimulate further development of each of them. This can lead to new theoretical results and real-life applications and, in particular, new results based on combination of these three data analysis approaches can be expected.