

Symmetry Studies of Entropy

An Introduction to Canonical Decompositions

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The first part of the short course is dedicated to identifying the language and the basic components of structured data and symmetries studies. It introduces examples defining and connecting the notions of symmetry, classification and experimentation in the natural sciences.

In the sequence, we give an introduction to the theory of representation of finite groups written within the context of developing the tools and techniques for the analysis of structured data.

The last section develops the applications of canonical decompositions to study the entropy in elementary statistical distributions.