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Abstract

Title:
Almost ordering distributions

An important problem in Statistics is the comparison of distributions. The goal of many researchers nowadays is trying to answer questions like: Which treatment is better for a given illness? Are the salaries of men higher than those of women?

In this talk, first we will pay some attention to the difference between the questions: "Is country A richer than country B?" and "Are people in country A richer than people in country B?"

It seems that the answer to the second question should be based on the stochastic ordering of distributions. Most of the talk will be devoted to analyse some weak points of this order and to show how we can ease them if we make a slight modification of the definition which allows to leave a small part of the population unordered.

The results I will present here have been obtained in cooperation with Profs. Alvarez-Esteban, del Barrio and Matrán, all of them at Universidad de Valladolid, Spain.