

# Preface

Data Science is a multidisciplinary approach based mainly on the methods of statistics and computer science suitably supplemented by the knowledge of the different domains to meet the new challenges posed by the actual information society. Aim of Data Science is to develop appropriate methodologies for purposes of knowledge, forecasting, and decision-making in the face of an increasingly complex reality often characterized by large amounts of data (big data) of various types (numeric, ordinal, nominal, symbolic data, texts, images, data streams, multi-way data, networks, etc.), coming from disparate sources.

The main novelty in the Data Science is played by the role of the KNOWLEDGE. Its encoding in the form of logical rules or hierarchies, graphs, metadata, and ontologies, will represent a new and more effective perspective to data analysis and interpretation of results if properly integrated in the methods of Data Science. It is in this sense that the Data Science can be understood as a discipline whose methods, result of the intersection between statistics, computer science, and a knowledge domain, have as their purpose to give meaning to the data. Thus, from this point of view, it would be preferable to speak about DATA SCIENCES.

The Data Science and Social Research Conference has represented an interdisciplinary event, where scientists of different areas, focusing on social sciences, had the opportunity to meet and discuss about the epistemological, methodological, and computational developments brought about by the availability of new data (big data, big corpora, open data, linked data, etc.). Such a new environment offers to social research great opportunities to enhance knowledge on some key research areas (i.e. development, social inequalities, public health, governance, marketing, communication).

Along, the conference has been a crucial issue to discuss critical questions about what all this data means, who gets access to what data, and how data are analysed and to what extent.

Therefore, aim of the conference, and of the present volume, has been to depict the challenges and the opportunities that the “data revolution” poses to Social Research in the framework of Data Science, this in view of building a SOCIAL DATA SCIENCE ... Let us own data science!

Naples, Italy

N. Carlo Lauro  
Professor Emeritus of Statistics

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Lauro, N.C.; Amaturro, E.; Grassia, M.G.; Aragona, B.;

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