## Scientific Data (Re)usability: Concepts, Impediments and Enabling Technologies

Costantino Thanos
Institute of Information Science and Technologies of the Italian National Research
Council

## **Abstract**

High-throughput scientific instruments are generating massive amounts of data. Today one of the main challenges faced by researchers is to make the best use of the world's growing wealth of data. Data (re)usability is becoming a distinct characteristic of modern scientific practice, as it allows reanalysis of evidence, reproduction and verification of results, minimizing duplication of effort, and building on the work of others. The talk will introduce the main concepts, identify the main technical impediments and suggest the data publication process as a bridge between data author and user. The relevant technologies enabling this process will be briefly described.