



Global Scientific Data Infrastructures

The GRDI2020 Vision

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Evolving Science

The Changing Methods of the World of Science:

- Empirical Science
- Theoretical Science
- Computational Science
- **Data-Intensive Science**

(“The Fourth Paradigm” Jim Gray)

Data-Intensive Science

Data-Intensive Science denotes any discipline whose progress is heavily dependent on **careful thought** about how to **use data**.

It is a new **paradigm** of Science based on **data-intensive computing**.

Multidisciplinary Science

By **Multidisciplinary Science** we intend a Science in which the approaches adopted to resolve a problem draw appropriately from multiple disciplines in order to redefine the problem outside of the normal boundaries and identify solutions based on a new understanding of complex situations

Interdisciplinary Science

By **Interdisciplinary Science** we intend a Science in which the approaches adopted to resolve a research problem involve the connection and integration of expertise belonging to different disciplines