

COMPUTATIONAL NETWORK THEORY

BIG DATA ANALYTICS AND THE ARCHITECTURE OF IRIS (INTELLIGENT REACHBACK INFORMATION SYSTEM)

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This workshop gives an overview on big data analytics and computational network theory: Nowadays, networks become more and more complex. Innovative Big Data Techniques support a comfortable understanding and characterization of their behavior.

This workshop consists of five parts:

- 1. Introduction: Topological Foundations
- 2. Computational Network Theory and Visual Analytics
- 3. Big Data Techniques and Predictive Analytics
- 4. Integration of the Analytic Capabilities into a comfortable Management Cockpit
- 5. Outlook: Executive Towers and IRIS

Data sets grow rapidly; on the other side traditional management information systems (MIS) have difficulties to handle this amount of data in a comfortable way. This workshop propose a new approach which is called IRIS. We discuss with the workshop participants advantages and disadvantages of our innovative approaches. At the end some examples within a research project between Malaysia and Germany are described.