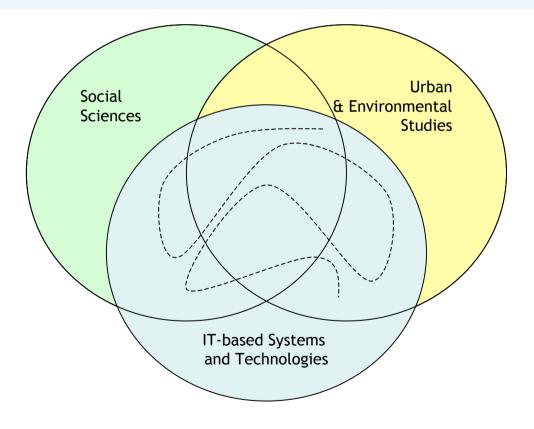
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The Systems and Technology perspective

Quantitative and Qualitative Methods and Tools for Analysis, Planning and Decision in Large Scale and Complex Societal Problems

- Including contributions from (R&D units & Departments)
 - Computer Science and Technology,
 - Statistics and Operations Research,
 - Geographical Engineering, Geophysical and Energy Systems,



Topics and scientific foundations

- Decision and Negotiation Support Systems,
- Information Repositories and Data Mining,
- Mobile Computer Supported Cooperative Work,
- Modelling and Optimization,
- Social Systems Simulation
- Geo-based Information Systems

Reference Programmes @ FCUL

- EU 7th Framework Programme 30+ on-going participations (in all domains)
- USA-Portugal Cooperation Initiatives
 - MIT Portugal Program Sustainable Energy Systems
 - CMU Portugal Program Information and Network Security and Mathematics
 - UTA Portugal Program Mathematics and Entrepreneuship (in development)
 - UCB Portugal Program Environment and Climate Change, IT (under assessment)

(Samples of [previous] R&D activity)

- Mobile Collaboration in Socio-Technical Systems (small scale)
- Negotiation and Facilitation Tools and E-Voting systems
- Computer-based Visualization and Simulation of Land Resources
- Simulation of Environmental Hazards (e.g. Tsunamis)
- Earth Observation
- Transport, <u>Energy</u> and Telecom Network Optimization and Modelling

Sample Research & Advanced Teaching Opportunities in the e-Planning initiative

- Research Initiatives
 - Mobile Collaboration
 - Visualization and Decision Support Tools applied to Planning
 - Spatial Systems Modelling and Optimization
- Advanced Training (PhD) on
 - IT-based Collaboration and Negotiation
 - Spatial/Geo-based Observation
 - Fundamental Optimization and Modelling