



Interdisciplinary connectivity: Understanding and managing complex systems using Connectivity Science

The i-CONN Network is now recruiting 15 PhD students!

The i-CONN network is a €4.1 million Marie Skłodowska-Curie Innovative Training Network (ITN) project funded by the European Commission, under the H2020 program, and is coordinated by Durham University. i-CONN is a consortium of 10 Universities and three partner organisations, and brings together scientists from Astrophysics, Computer Science, Ecology, Geomorphology, Hydrology, Neuroscience, Systems Biology and Social Science. The goal of i-CONN is to train a new cohort of 15 researchers specialized in the developing field of Connectivity Science who will be capable of developing interdisciplinary approaches to connectivity across a range of disciplines and real-life applications in the next five to 10 years. Regular workshops and secondments to other EU partners will develop transferable skills and facilitate the exchange of ideas between ESRs. A very attractive salary and benefits package is offered to successful applicants.

Current Vacancies

- 1) Spatial and temporal roles of critical nodes in ecogeomorphic systems (Durham University, UK)
- 2) Minimal models of dynamics on networks to study generic SC/FC relationships (Jacobs University, Germany)
- 3) Self-organized collective patterns on graphs (Jacobs University, Germany)
- 4) Catastrophic transitions: Regime shifts in network topology resulting in novel systems (Masaryk University, Czech Republic)
- 5) Analysis of multi-frequency dynamic coherence networks in large-scale electrophysiological recordings (Aix-Marseille University, France)
- 6) Scaling connectivity science in fluvial systems (Durham University, UK)
- 7) Structure in patterns in ordered datasets with applications in astrophysics, neuroscience and archaeology (European University Cyprus, Cyprus)
- 8) Changing connectivity properties impacting resilience in riverine landscapes as socio-ecological systems (BOKU, Austria)
- 9) Critical nodes in economic connectivity: A multi-method application to facilitate structural transitions (Masaryk University, Czech Republic)
- 10) Hotspots and hot moments: the role of connectivity and resilience science for managing human-impacted catchment systems (University of Vienna, Austria)
- 11) Connectivity within network processes and coupling with global flows (AAISCS, Cyprus)
- 12) Flows of critical (energy) resources (MODUL University Vienna, Austria)
- 13) Resilience of human interactions with new landscapes (Durham University, UK)
- 14) Understanding the emergence of connectivity science in practice: a network of network colleagues (to be confirmed)
- 15) Using connectivity science to determine the fate (source-pathway-interceptors) of specific diffuse pollutants and pathogens in the water supply chain (to be confirmed)

Further Information

Please see our website <http://iconn.network/>.