



Monday 3<sup>th</sup> June 2019 at 3 p.m. at the IERMB (MRA Building 2<sup>nd</sup> floor, Autonomous University of Barcelona, Bellaterra)

**“Methods for the integrated analysis of social metabolism in rural systems. Cases of Mauritius, Ecuador and Gran Canaria”**

Dr. Tarik Serrano  
Barcelona Institute of Regional and Metropolitan Studies

Tarik Serrano will introduce some tools of the MuSIASEM approach (Multi-Scale Integrated Analysis of Societal and Ecosystem Metabolism) used for the studies of rural systems using some results of cases in Mauritius, Ecuador and Gran Canaria. These examples also illustrate quantitative analytical tools to make an assessment of the nexus among water, energy and food, at different scales and with diverse purposes. Then, there will be a general review about some properties of the indicators used to characterise a metabolic system, focusing in considerations about formalisation, aggregation, representation, normativity and constraints. The seminar will finish with a discussion of the potential usefulness of some concepts and tools for concrete applications of the Socio-Ecological Integrated Analysis Model (SIA).

