

## **Climate impact assessment through input-output networks**

Topic: Agent-Based Modeling and Input-Output Analysis - I

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Assessment of climate impacts is mostly based on equilibrium models considering expected value of impacts. This approach neglects a number of key features : (i) the spatial heterogeneity of impacts and of the distribution of economic activity, (ii) the tail of the distribution of impacts, (iii) the propagations of impacts out-of-equilibrium. In this paper, we develop an agent-based model of the propagation of shocks in input-output networks that overcome these shortcomings. Our approach starts from a representation of direct climate impacts on the production process of geolocalized firms. We then use an agent-based model to assess the propagation of impacts through global supply chains.