

## **A pretopology analysis for the dissemination of pulses in the economy: a case of study for Mexico and Brazil**

Topic: Input-Output Tables as a Network I

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We use pretopology to analyze the dissemination of economic pulses into the economic structure of two countries, Mexico and Brazil. We picked the input-output matrices for the years 1980 and 2013 because we want to explore the effects of the liberalization on their structures and the way each country adapts. This paper uses communities of economic sectors, constructed by the spectral method, that are dense connected to each others and are obtained from an input-output matrix that is binarized using the principal component method. The binarization of the input-output matrix and the obtaining communities were computed by the computer program Mathematica, and the pretopological analysis by the program MARX. We conclude that both economies, although have similitudes into their structures the 80  s, have a very different development due the way they decide to pass from a state-controlled economy into a liberalized one.