# How to use recurrence networks for geophysical time series analysis?

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Recurrence plot based recurrence networks are an approach to analyze time series using complex networks theory. In both approaches, recurrence plot and the recurrence networks, we define a threshold to identify recurrent states. The selection of the threshold is very important for analysing the time series correctly via recurrence networks approach. In this talk we contribute a novel method to choose a threshold adaptively for time series. We show comparison between constant threshold and adaptive threshold cases to study transitions in the dynamics due to a change in the control parameters. This novel methods enables us to identify climate transitions from a lake sediment record.