
Heterogeneously Coupled Maps. Coherent behaviour and reconstructing network from data

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Abstract

In this joint work with Matteo Tanzi and Tiago Pereira, we study networks of heterogeneously coupled maps. Using transfer operators on invariant cones of densities and a concentration inequality, we show that different types of dynamics emerge across distinct connectivity layers. Moreover, it turns out that data arising from such systems can be used to reconstruct detailed information on the dynamics and the network. Reference: <https://arxiv.org/abs/1704.06163>. To appear in JEMS.

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