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Authors:	<a href="#">Arun, Anugraha</a>
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Abstract:	Small World networks are relevant in a wide range of naturally occurring and human engineered systems. In this thesis, we explore the synchronisation of limit cycle oscillators connected in a 'Small World' network. We consider two limit cycle oscillators: the Kuramoto oscillator and the FitzHugh-Nagumo oscillator, with the former being a one-dimensional oscillator and the latter covering the two-dimensional case. We find that synchronisation is dependent on the coupling strength, denoted by $k$ and the rewiring probability, denoted by $p$ for both static and dynamic rewiring. Chimeras are seen to emerge for intermediate values of $p$ and $k$ .
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