

## Memory Capacity of Input-Driven Echo State Networks at the Edge of Chaos

Reservoir computing provides a promising approach to efficient training of recurrent neural networks, by exploiting the computational properties of the reservoir structure. Various approaches, ranging from suitable initialization to reservoir optimization by training have been proposed. In this paper we take a closer look at short-term memory capacity, introduced by Jaeger in case of echo state networks. Memory capacity has recently been investigated with respect to criticality, the so called edge of chaos, when the network switches from a stable regime to an unstable dynamic regime.

**Author:** Mr PETER , Barancok (University in Bratislava)

**Presenter:** Mr PETER , Barancok (University in Bratislava)