Accurate detection of spiking motifs by learning Heterogeneous Delays of a Spiking Neural Network

Laurent Perrinet

ICANN workshop on ***Recent Advances in SNNs***

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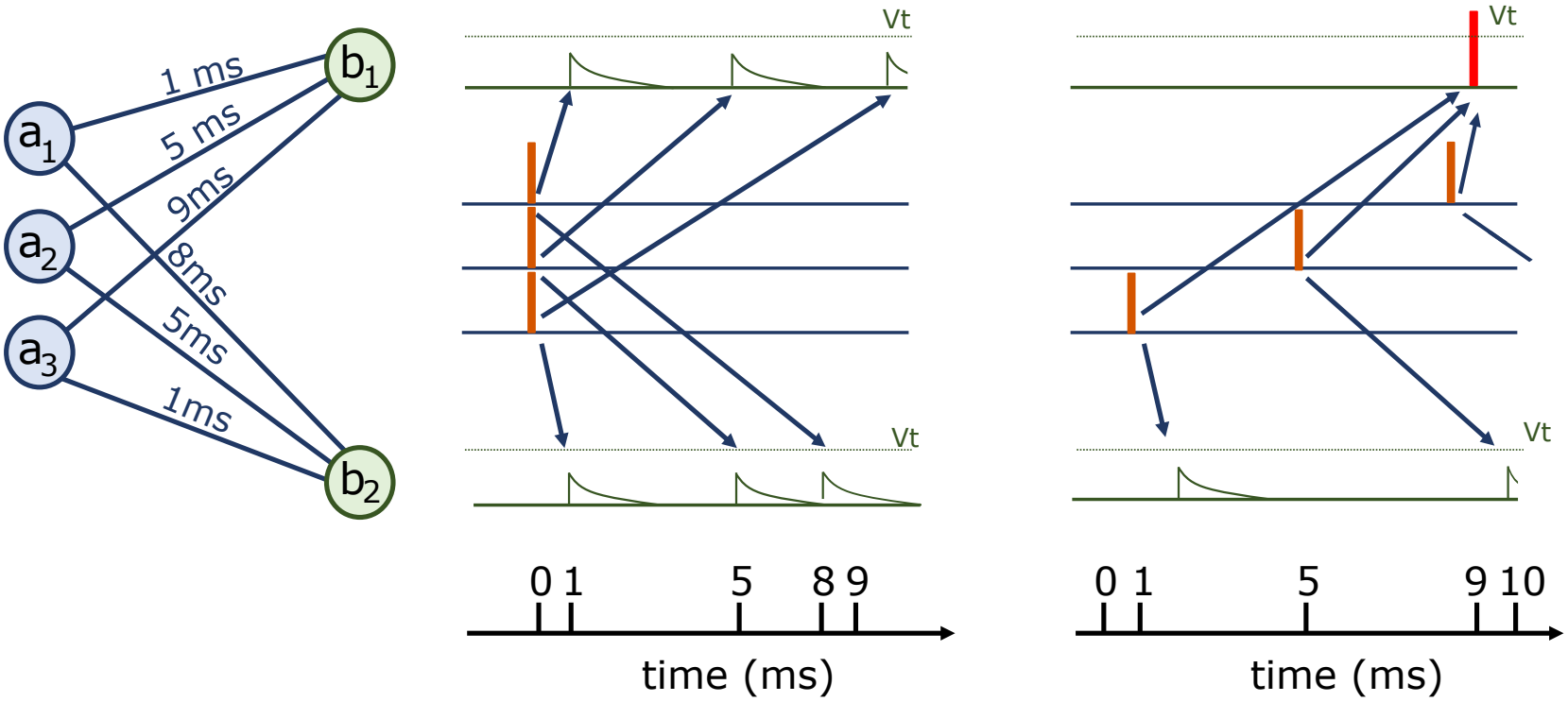
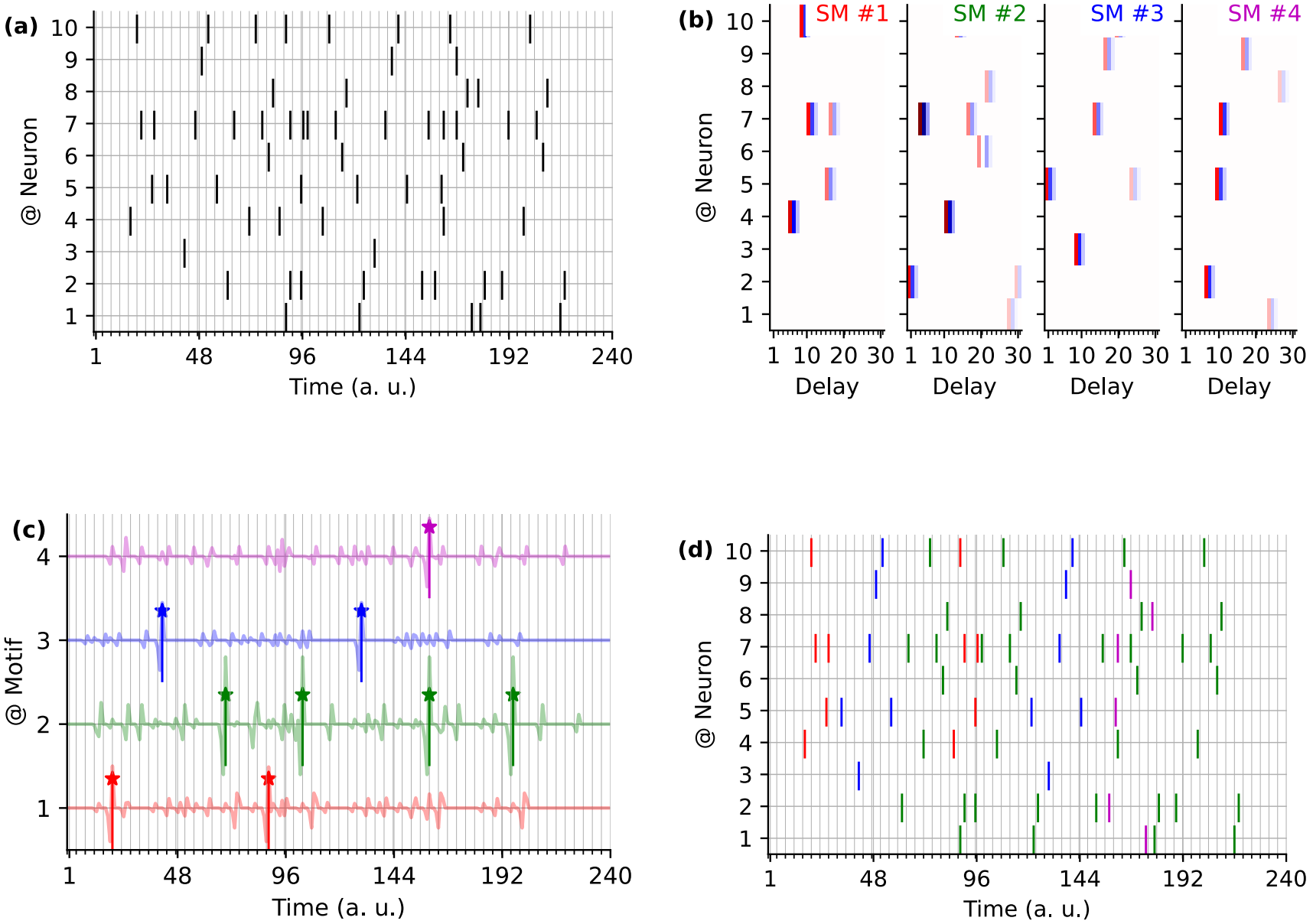
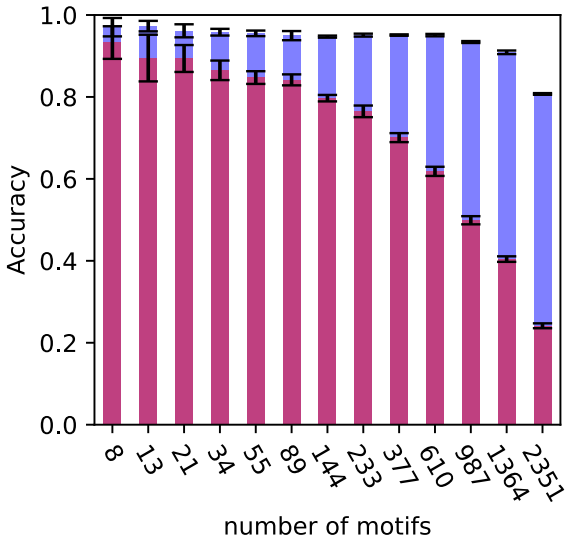
https://laurentperrinet.github.io/talk/2023-09-27-icann

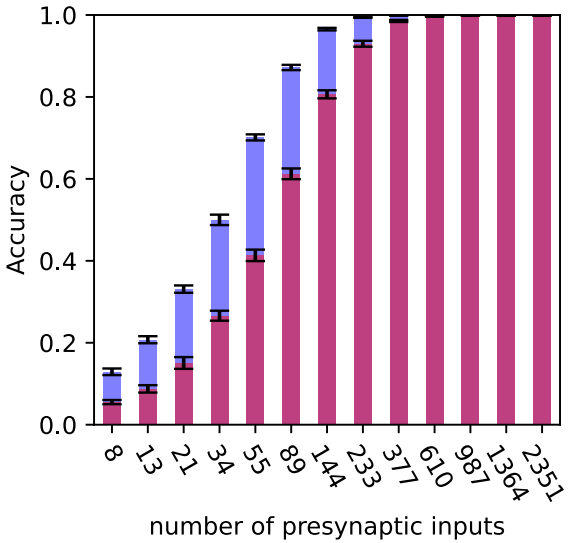
Core Mechanism of Spiking Motif Detection

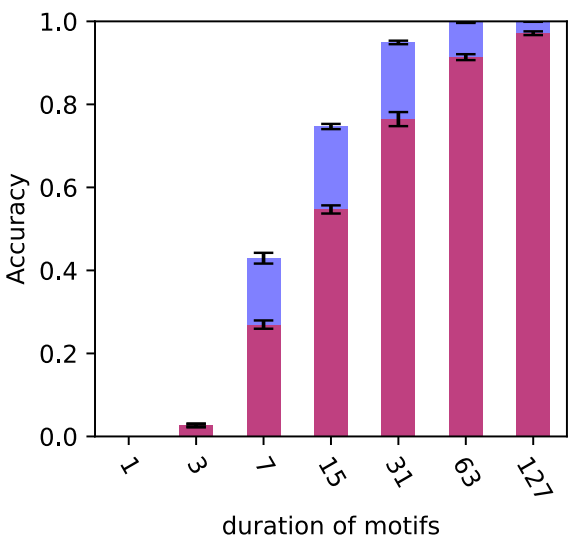


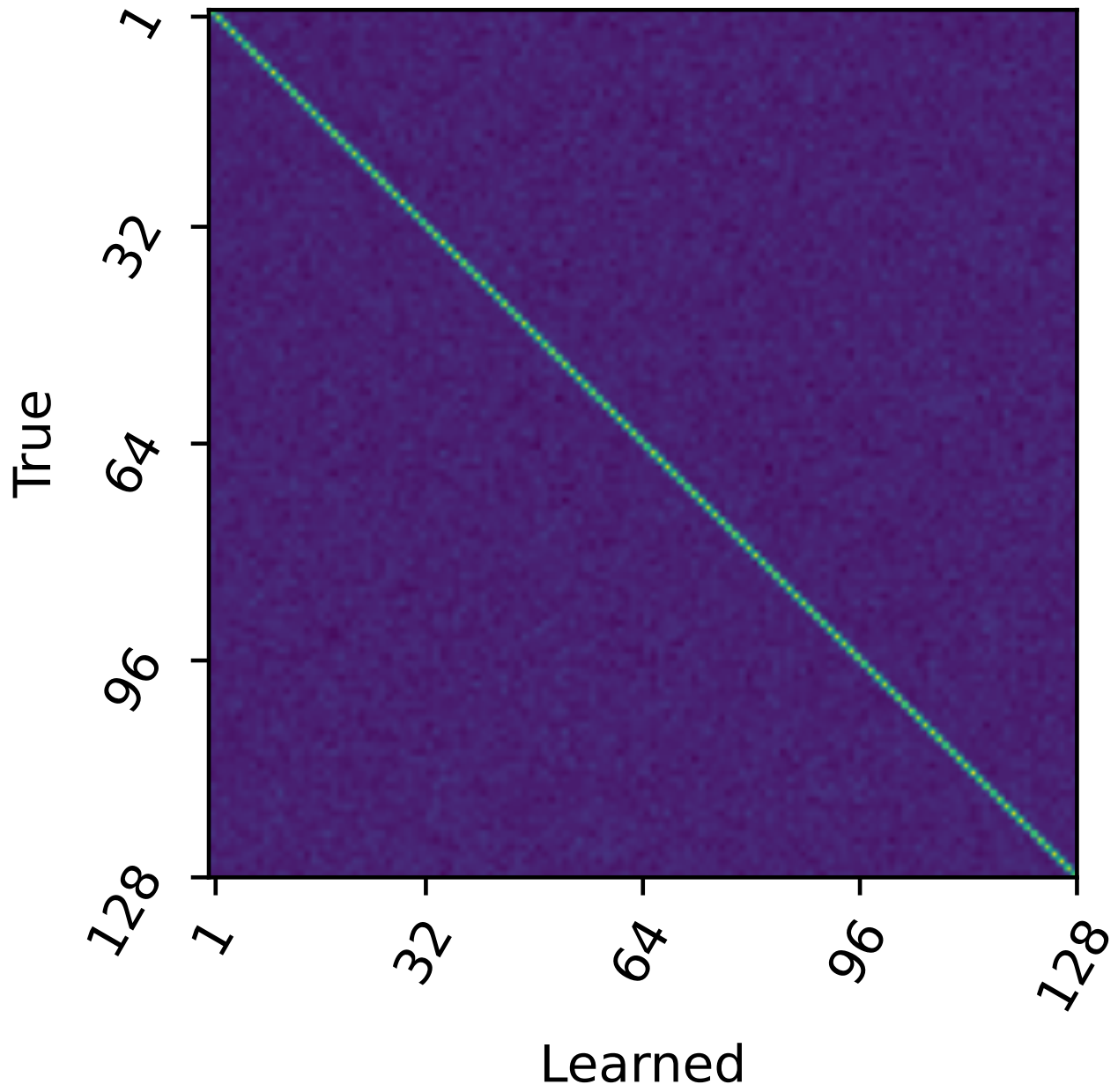

(a)
@ Neuron
Time (a. u.)
(b)
SM #1
SM #2
SM #3
SM #4
@ Neuron
Delay
(c)
@ Motif
Time (a. u.)
(d)
@ Neuron
Time (a. u.)

Detecting spiking motifs using heterogeneous delays








True
1
32
64
96
128
Learned
1
32
64
96
128

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