

Fig. S1  $\mid$  Comparison of autocorrelogram with inter-complex spike interval histogram.

histogram. The autocorrelogram of the same Purkinje cell as shown in Fig. 2A (10 ms bins) convolved with a 5 ms kernel (red curve) compared to the convolved inter-complex spike interval (ICSI) histogram (orange curve). The auto-correlogram includes also intervals between non-consecutive complex spikes. Consequently, on a short time scale, both auto-correlogram and ICSI histogram are identical, but they diverge at longer time scales.