



Figure S8: Variation of Fig. 9 for a simulation where we used current-based synapses without short-term plasticity. The post-synaptic response had an exponentially decaying form $\epsilon(s) = e^{-s/\tau_\epsilon}/\tau_\epsilon$, with $\tau_\epsilon = 5ms$. The value of the maximum synaptic weight was $w_{max} = 106.2$ pA. All other parameter values were the same as in computer simulation 4. The variance of the membrane potential increased for pattern P from $2.84(mV)^2$ to $5.89(mV)^2$ (panel C), and decreased for pattern N (panel D), from $2.57(mV)^2$ to $1.22(mV)^2$.