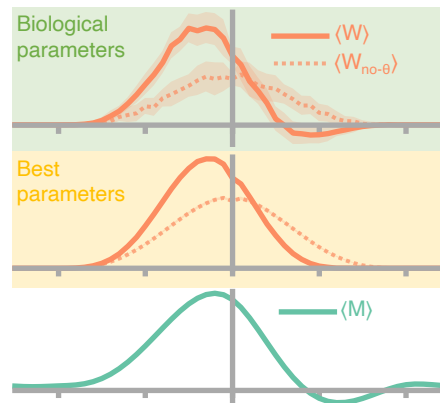


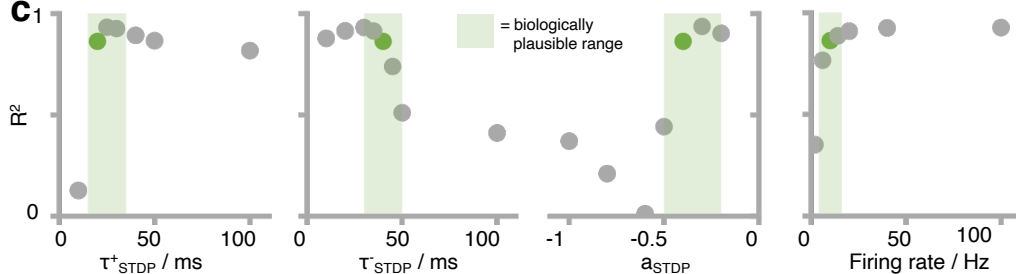
a

			Sweep range	Top 3 sweep optima*			Biological parameters†
Simulation parameters	STPD	$\tau_{\text{STDP}}^+ / \text{ms}$	[10→100]	20	10	40	20‡
		$\tau_{\text{STDP}}^- / \text{ms}$	[10→100]	45	40	100	40‡
		a_{STDP}	[-0.1→-1.0]	-0.3	-0.2	-0.3	-0.4‡
		firing rate / Hz	[1→50]	50	50	50	5§
	θ	precess fraction, f	no sweep			0.5	
		κ	no sweep			1	
		θ -frequency, ν_θ / Hz	no sweep			10	
		Learning rate, η_{STDP}	no sweep			0.05	
	TD	$\tau_{\text{TD}} / \text{s}$	no sweep			4	
		Learning rate, η_{TD}	no sweep			0.01	
		L2 regularisation, λ	no sweep			0.01	
Performance metrics	R^2 (M,W)		-	0.97 (0.76)	0.97 (0.77)	0.97 (0.82)	0.86 (0.65)
	SNR(W)		-	66.7 (53.0)	47.7 (26.3)	61.8 (54.6)	7.3 (3.7)
	θ (No- θ)		-	-0.25 (-0.05)	-0.15 (-0.05)	-0.25 (-0.05)	-0.25 (-0.05)

b



c

*as determined by R^2 (M,W _{θ})

† as used in paper, determined from literature...

‡ Bush et al. (2010)

§ Muller

|| Fitted to Jeewajee and Barry (2014), figure 5a

¶ Find source

d

