

Symbol	Definition	Description
$\tilde{h}_{e,i}$	$h_{e,i}/h_{e,i}^{\text{rest}}$	Population mean soma dimensionless electric potential
$\tilde{I}_{ee,ei}$	$I_{ee,ei}\gamma_e/(G_e \exp(1)S^{\text{max}})$	Total $e \rightarrow e$, $e \rightarrow i$ input from excitatory synapses
$\tilde{I}_{ie,ii}$	$I_{ie,ii}\gamma_i/(G_i \exp(1)S^{\text{max}})$	Total $i \rightarrow e$, $i \rightarrow i$ input from inhibitory synapses
$\tilde{\Phi}_{e,i}$	$\phi_{e,i}/S^{\text{max}}$	Long range (corticocortical) input to e,i populations
\tilde{t}	t/τ	Dimensionless time
\tilde{x}	$x/(\tau\tilde{v})$	Dimensionless space

Dynamical variable definitions for the dimensionless SPDEs model. The dimensionless variables (left column) are defined in terms of the dimensional symbols (middle column) found in Table 1 of (Steyn-Ross, Steyn-Ross, Sleight, & Whiting, 2003). The variables are described in the right column. Subscripts e and i refer to excitatory and inhibitory. We make the notational simplifications in agreement with the values used in (Steyn-Ross, Steyn-Ross, Sleight, & Whiting, 2003): $\tau_e = \tau_i = \tau$, $S_e^{\text{max}} = S_i^{\text{max}} = S^{\text{max}}$, and $h_e^{\text{rest}} = h_i^{\text{rest}} = h^{\text{rest}}$.