

# Stochastic Computations in Cortical Microcircuit Models

Stefan Habenschuss, Zeno Jonke, Wolfgang Maass

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## Sudoku: additional info

Posted by [zjonke](#) on 12 Aug 2014 at 09:29 GMT

For solving Sudoku we used simple stochastic neuron model with current-based synapses (not the LIF model as in microcircuit model, therefore  $R, C$  and  $v_{\text{rest}}$  are not used here). This model uses eq. 60 only for spike generation. When a neuron is non-refractory, it spikes according to the eq. 60 after which it is refractory for  $\tau$  period.

## Missing unit

Posted by [zjonke](#) on 12 Aug 2014 at 09:28 GMT

The unit for  $\Delta u$  parameter is missing in the Methods section: Solving constraint satisfaction problems in networks of spiking neurons, Details to implementation and simulation for Figure 5 (Sudoku), page 26.

The parameter  $\Delta u$  should be in mV units ( $\Delta u = 0.5 \text{ mV}$ ).