**Neural network for RP2 oscillations**

**Single neuron dynamics**

(1)

(2)

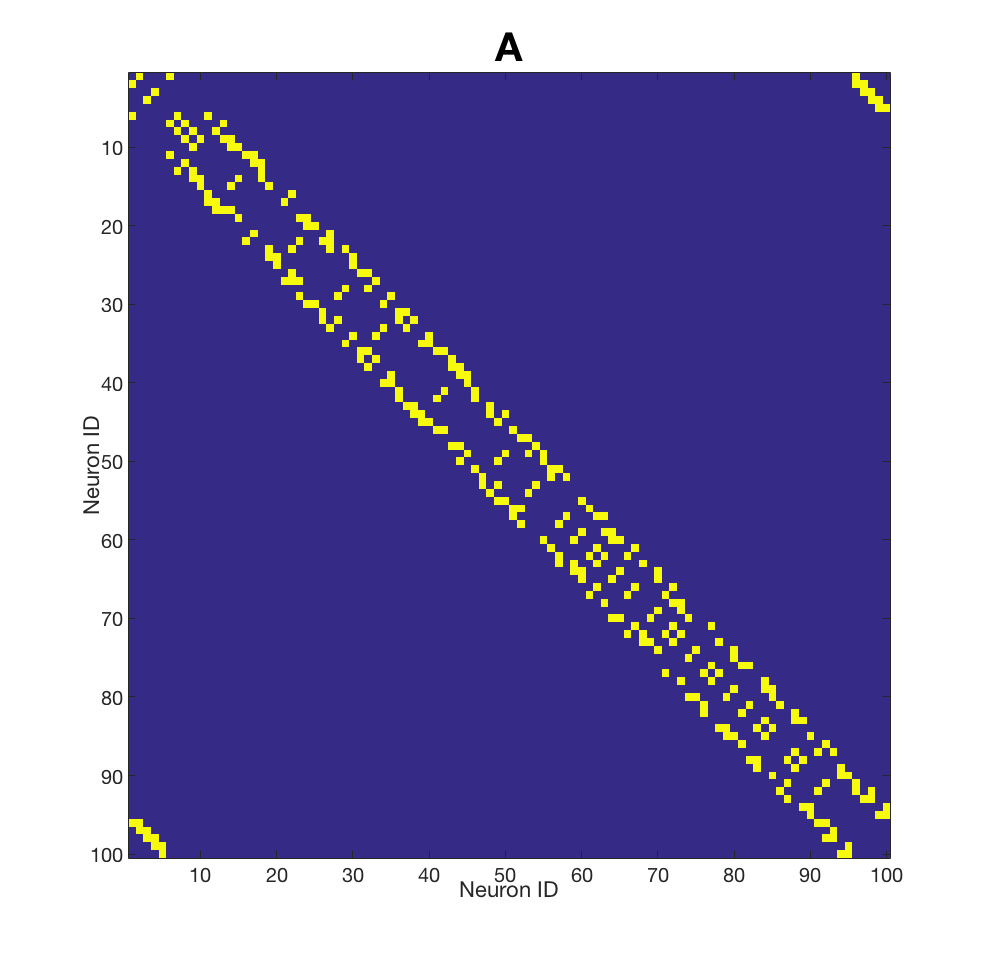
Intrinsic heterogeneity: bursters and excitable cells

**Synaptic current**

(3)

**Gap-junction current**

(4)

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**Connectivity**

N – number of neurons

S – number of sensors

A – number of actuators

sp – spikes in the spike train

– vector of sensory input

**Indexes**

k – index over neurons

i – index over synapses

j – index over spikes

Summation over synaptic connections is organised by sparse connectivity matrix **A**