

Erratum

Erratum to “Self-organizing molecular networks”

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The publisher regrets that when the above article was printed Fig. 5 and Fig. 6 were inadvertently printed in black and white. The figures are reproduced in colour as required on the following page.

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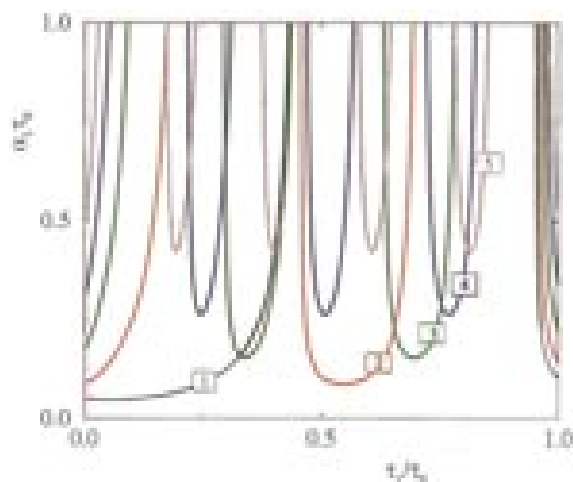


Fig. 5. The bifurcation diagram for the dynamical instability leading to spiking in the reaction (Eq. (8)) for $N=1000$ enzymes and the reaction parameters $\alpha_0/\tau_0=1$ and $\gamma/\tau_0=20$. Spiking with different numbers of coherent molecular groups develops when the boundaries shown in the figure are crossed while moving up from the region of low intensity of the allosteric activation α_1/τ_0 at a constant ratio τ_1/τ_0 . The boundaries correspond to the onset of spiking with two groups (red curves), three groups (green curves), four groups (blue curves), five groups (brown curves). The black curves indicate the onset of synchronous spiking of the whole population.

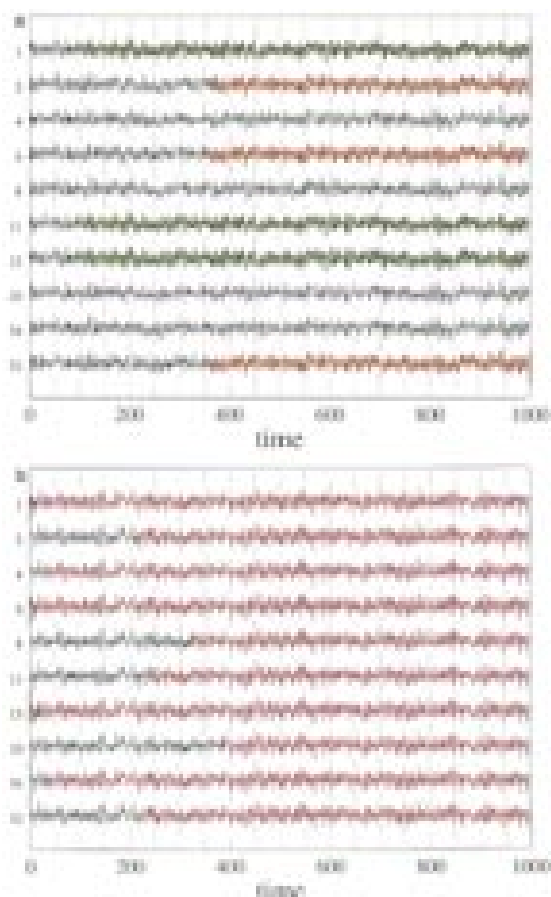


Fig. 6. Time-dependent integral activity $u_i(t)$ of 10 selected networks in an ensemble of 100 identical networks each consisting of 50 neurons for different intensities of global coupling, corresponding to (a) dynamical clustering ($\epsilon=0.35$) and (b) complete synchronization ($\epsilon=0.5$). Synchronous signals are indicated by the same colors. Random initial conditions, random choice of synaptic connection weights inside a network.