1 Additional Figures

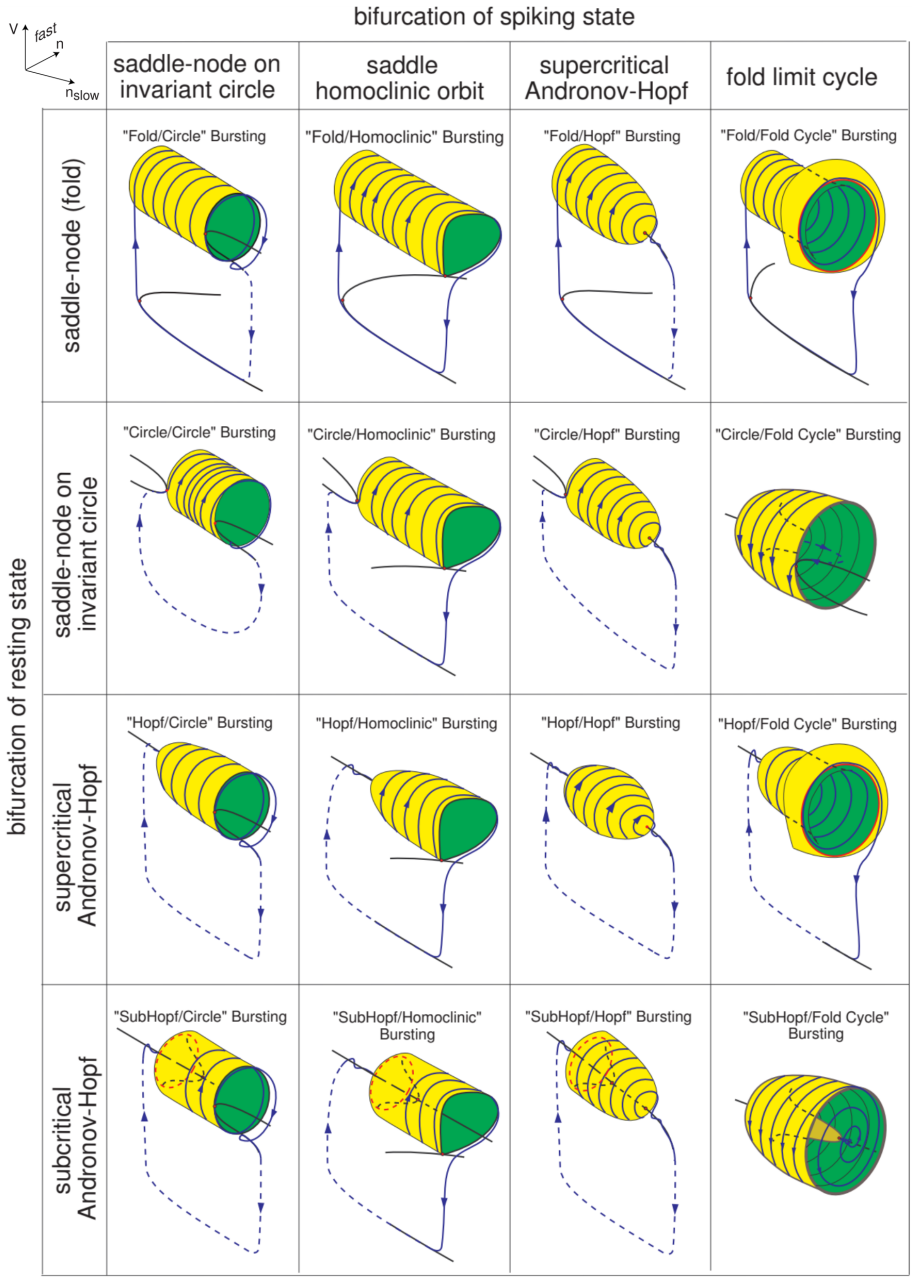

Figure 1: Codimension-1 bifurcations of resting and spiking states for "2+1" point-circle bursters. The figure shows possible bifurcations for the case, when the fast (slow) system is two- (one-) dimensional. The inset on the top-left indicates the axis of the plots. V - membrane potential, n (n_{slow}) - fast (slow) variable of dynamical system. Adapted from (Izhikevich 2006), with modifications.

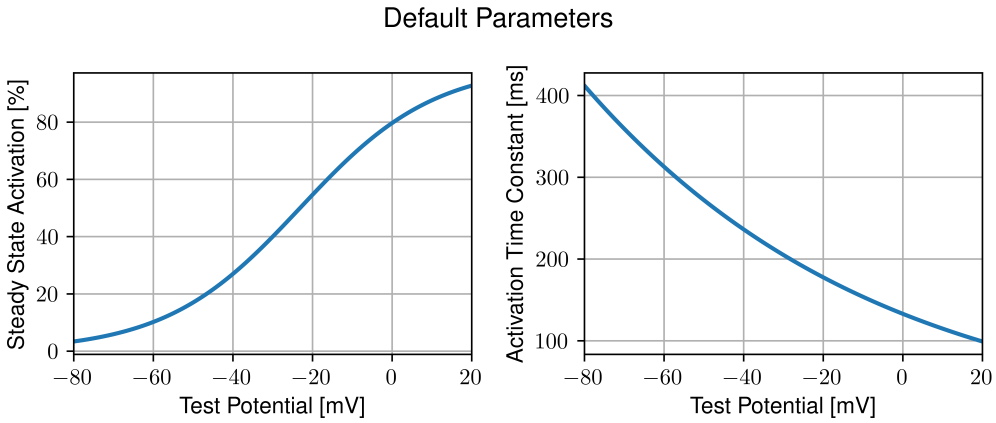

Figure 2: EAG Channel Activation Variable and Kinetics. TEXT!!!

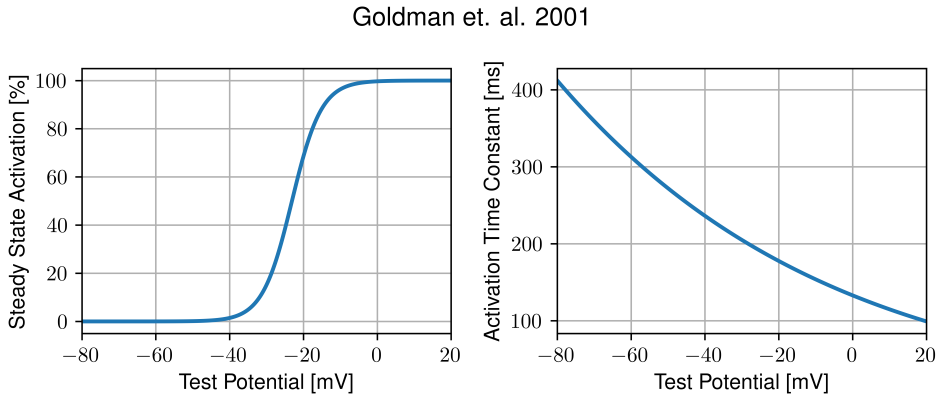

Figure 3: EAG Channel Activation Variable and Kinetics for Goldman Model. TEXT!!!

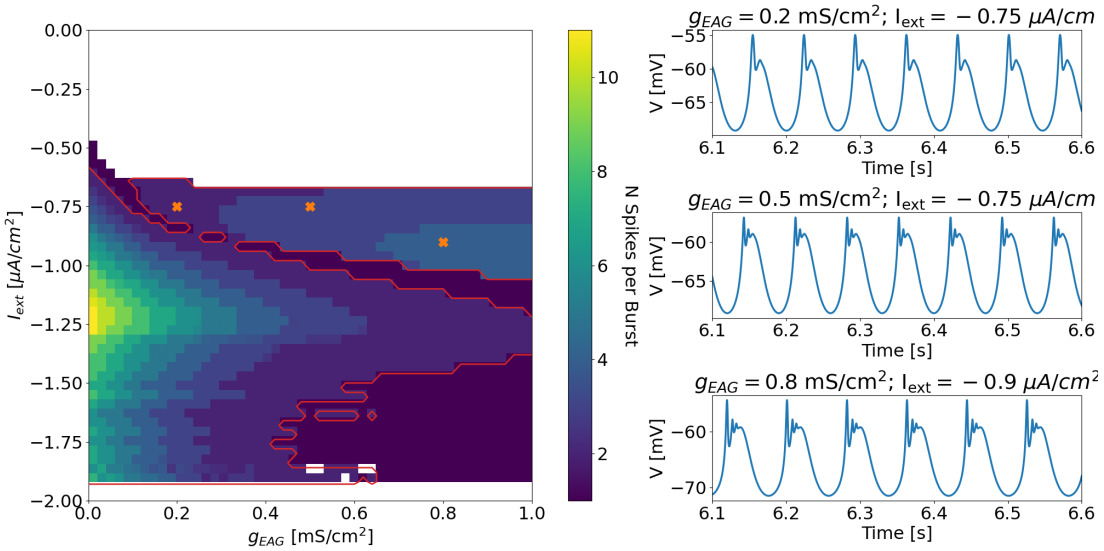

Figure 4: Investigating region with opposite effect of EAG channel. Burst detection was implemented as described in the supplementary material of (Franci, Drion, and Sepulchre 2018). Left: same as Figure **??**. Right: Representative voltage traces obtained from simulations using the values of I_{ext} and g_{EAG} indicated by the orange 'x' markers on the heatmap. The region where increasing maximal conductance of EAG channels increase the number of spikes, correspond to the region with small-amplitude oscillations (see also Figure 5)

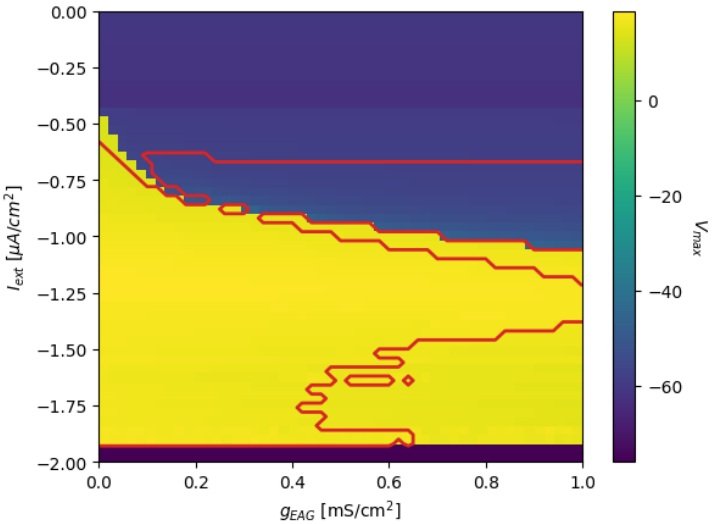

Figure 5: Small amplitude oscillations in I_{ext}-g_{EAG} parameter plane The region where EAG channel had an opposite effect (increasing g_{EAG} causes increase in the number of spikes per burst) corresponds to the region with low-amplitude oscillations.