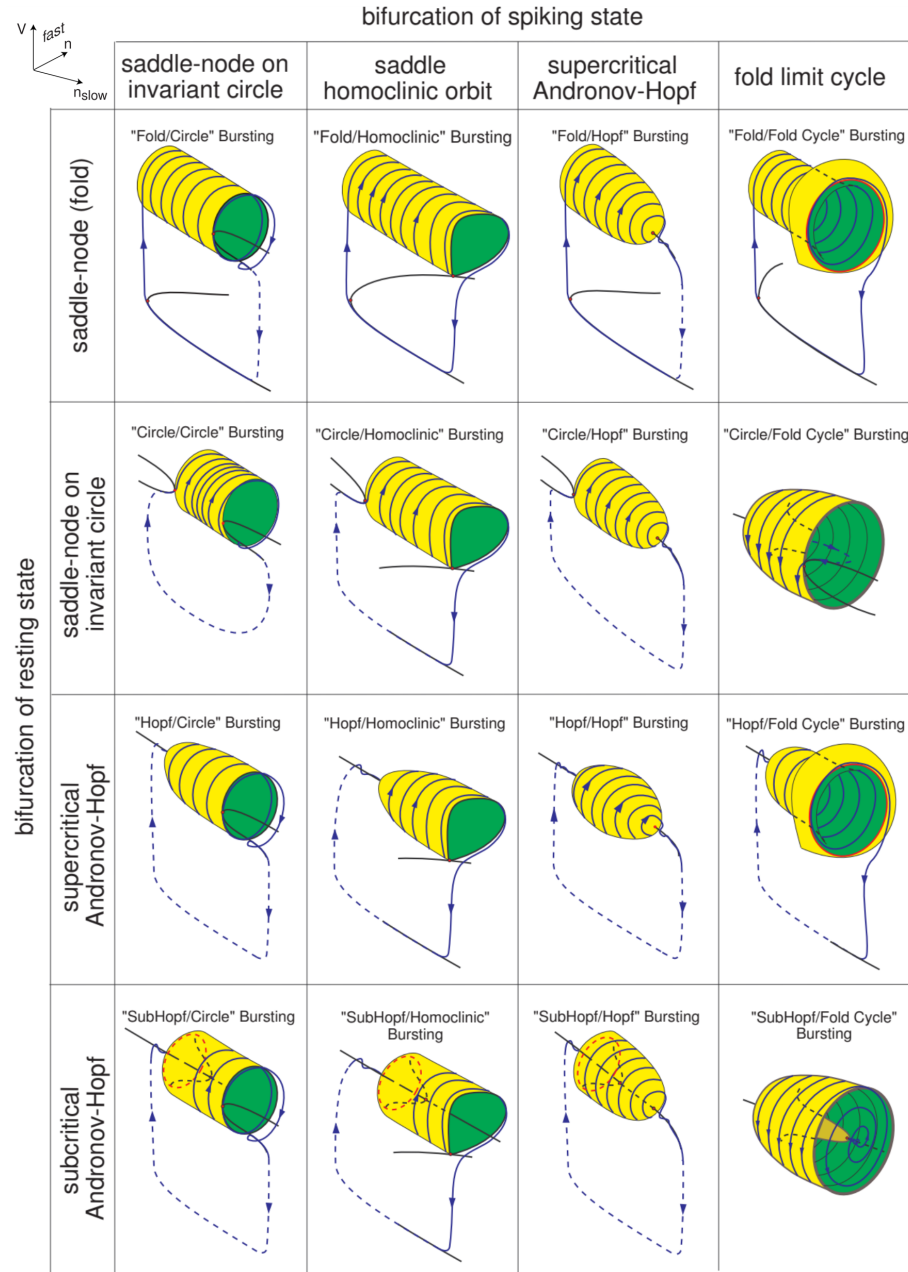
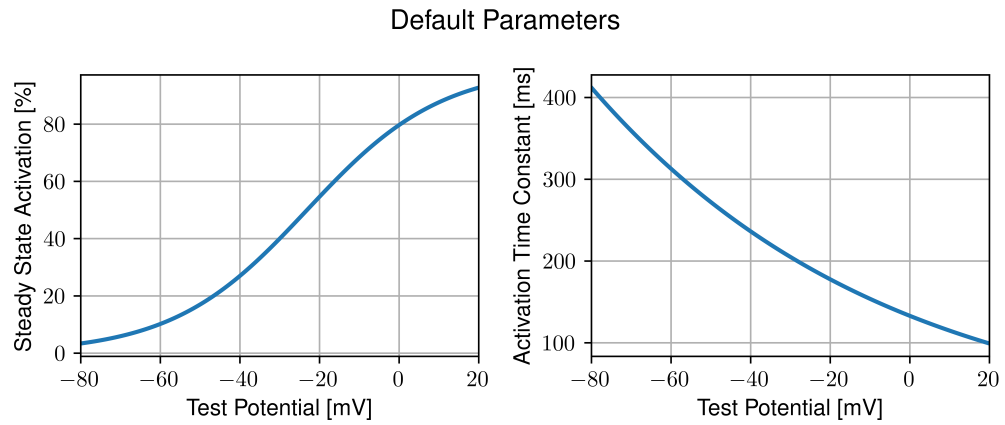


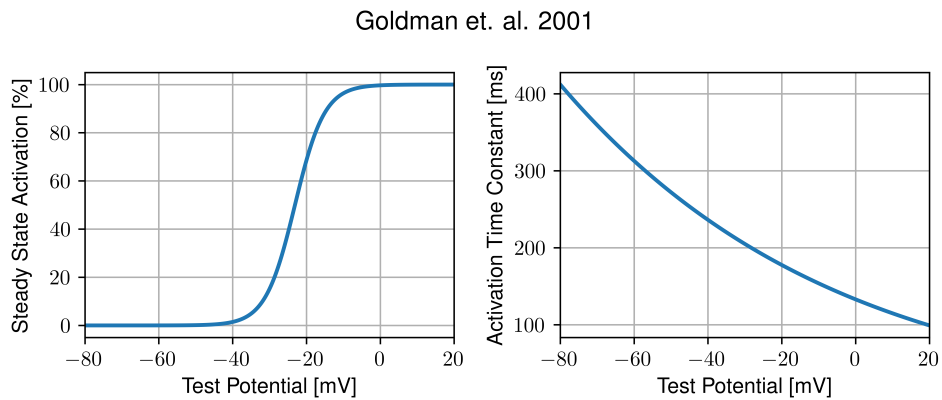
# 1 Additional Figures



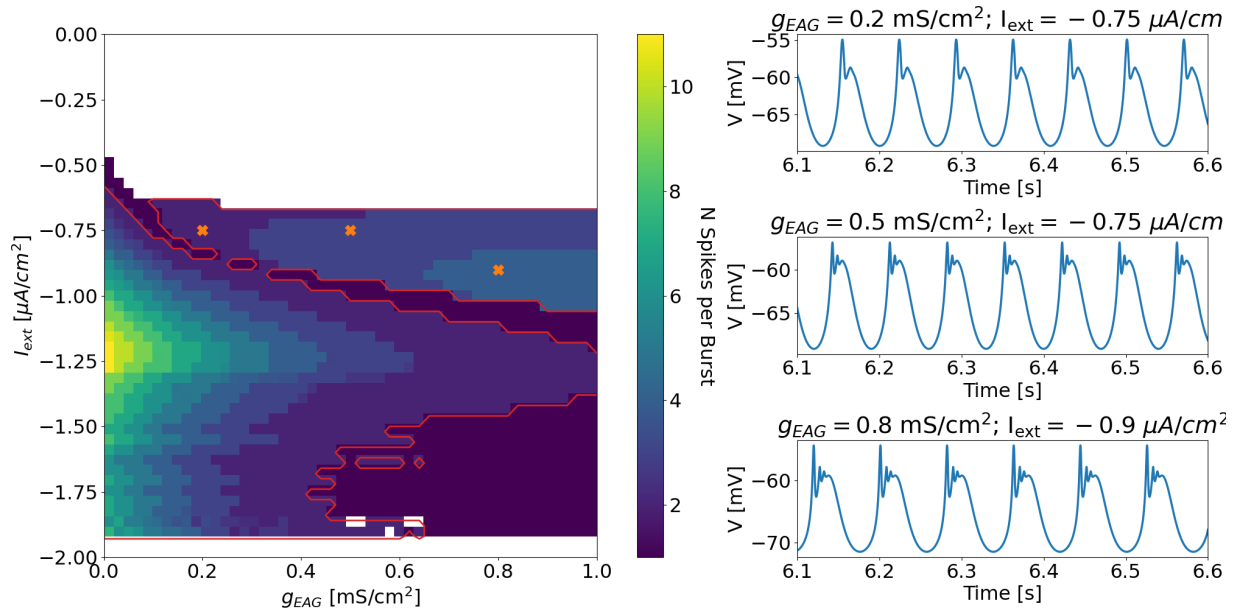
**Figure 1:** Codimension-1 bifurcations of resting and spiking states for "2+1" point-circle bursters. The figure shows possible bifurcations for the case, when the fast (slow) system is two- (one-) dimensional. The inset on the top-left indicates the axis of the plots.  $V$  - membrane potential,  $n$  ( $n_{slow}$ ) - 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: Illustration of Methodological Limitation for Burst Detection.** 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  $I_{\text{ext}}$  and  $g_{\text{EAG}}$  indicated by the orange 'x' markers on the heatmap.