J. E. Rubin, N. A. Shevtsova, G. B. Ermentrout, J. C. Smith, and I. A. Rybak
Multiple rhythmic states in a model of the respiratory CPG
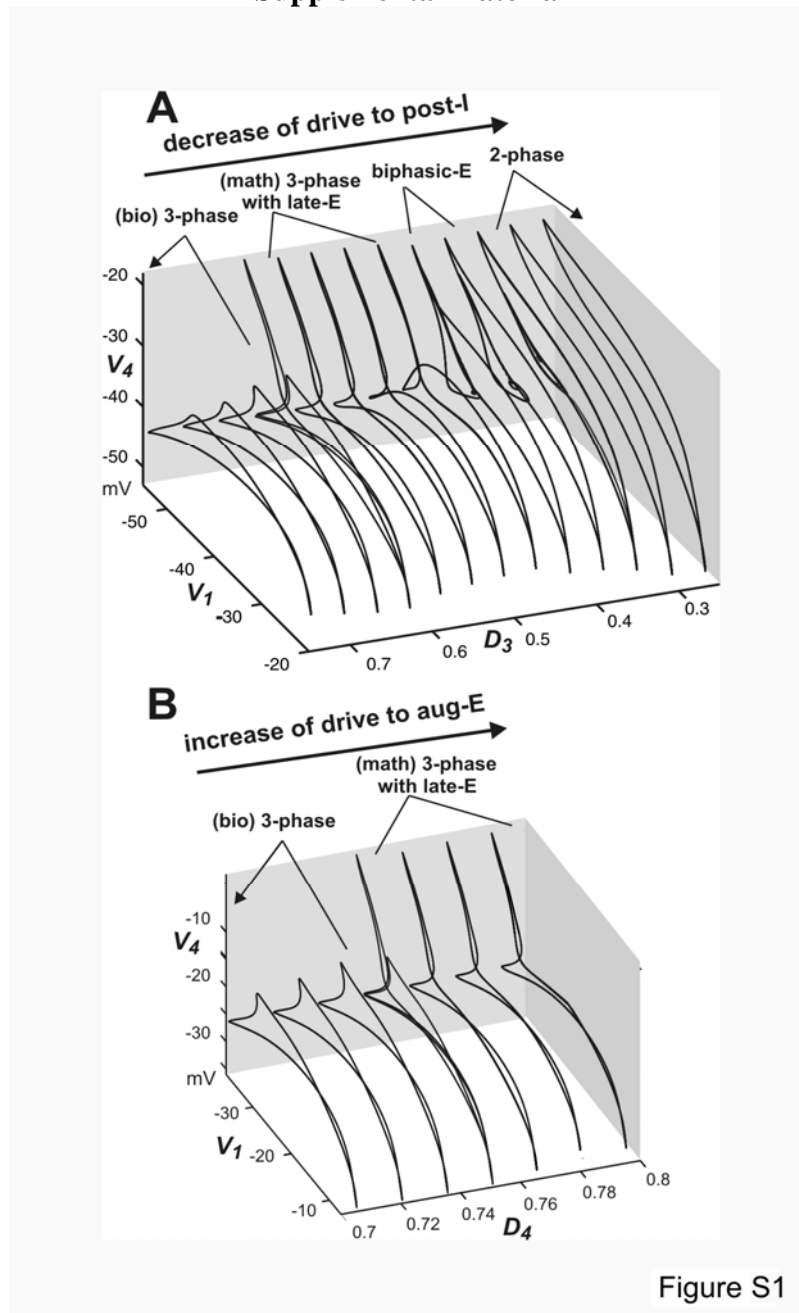
Supplemental material

Figure S1

FIG. S1. Dynamics of state transitions with progressive change in drive to one neuron. The state transitions in both **A** and **B** are represented by 3D diagrams with two axes showing changes in membrane potentials of pre-I (V_1) and aug-E (V_4) neurons and the third axis representing changing (dimensionless) drive. **A:** Transition from the "bio" three-phase pattern to the two-phase pattern with progressive change of drive to post-I neuron (D_3); this diagram shows the same transformations as those shown in Fig. 11. **B:** Transition from the "bio" three-phase pattern to the "math" three-phase pattern with progressive change of drive to aug-E neuron (D_4).
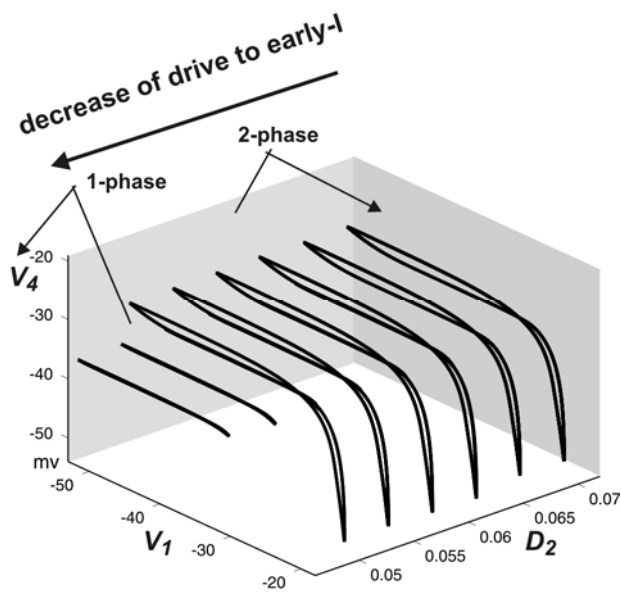
Figure S2

FIG. S2. Dynamics of state transitions from two-phase oscillations to one-phase oscillations. The state transitions are represented by a 3D diagram with two axes showing changes in membrane potentials of pre-I (V_1) and aug-E (V_4) neurons and the third axis representing changing (dimensionless) drive to early-I neuron (D_2); this diagram shows the same transformations as those shown in Fig. 14.