Main MATLAB program main112.m calculates dynamics (Figs 2A, 3A,3B,3D of the text), parameters are defined in the file with comments

ode112.m called by main112.m calculates the RHS of equations

Jacob112.m called by ode112.m calculates Jacobian of the RHS of equations

Phase-diagram2 called by main112.m draws the phase diagram (Fig 2B and Fig 3C)