

Bifurcation diagrams of the dynamic regimes of *de novo* protein synthesis at the activated synapse depending on the recycling contribution to the maintenance of the pool of active receptors on the postsynaptic membrane (k_{rz}).

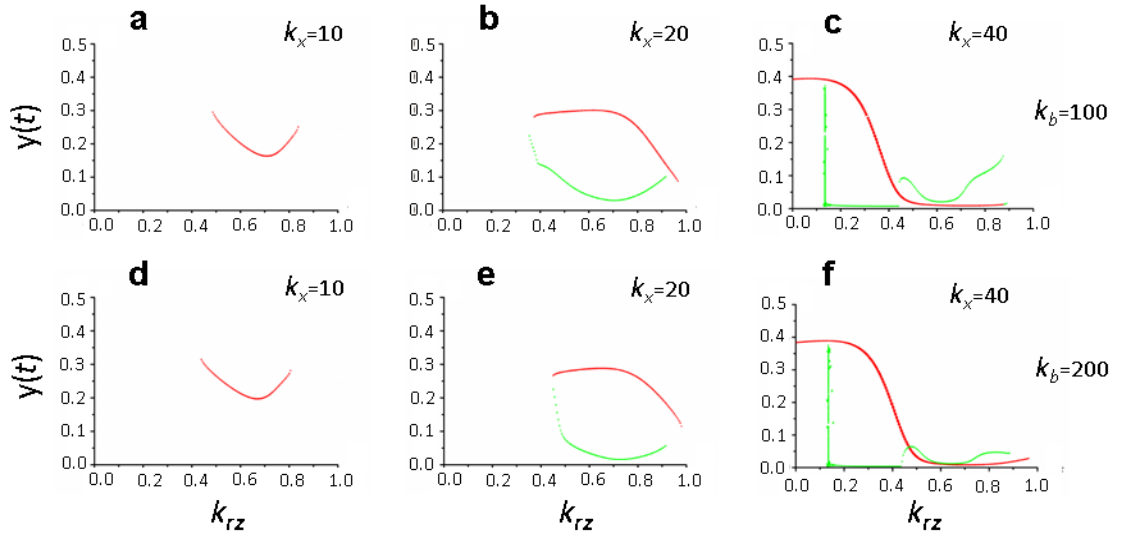


Fig. S2. Dynamic regimes of system (1) depending on the rates of signal-dependent FMRP phosphorylation (k_b) and FMRP-dependent synthesis of receptor proteins and their incorporation into the membrane (k_x). Bifurcation diagram constructed at the intersection of the trajectory $(x(t), y(t))$ with the Poincaré map $x(t)=1.70$ (a,d) and $x(t)=2$ (b,c,e,f) in the phase space (x,y,z) . Parameter values: $K_a=1$, $h_x=2$, $h_b=10$, $\tau_a=1$, $\tau_b=2$, $\tau_r=3$, $\tau_e=3$ (a-f); $k_x=10$ (a,d), $k_x=20$ (b,e), $k_x=40$ (c,f), $k_b=100$ (a-c), $k_b=200$ (d-f). Values of the remaining parameters are shown in the basic set (2).