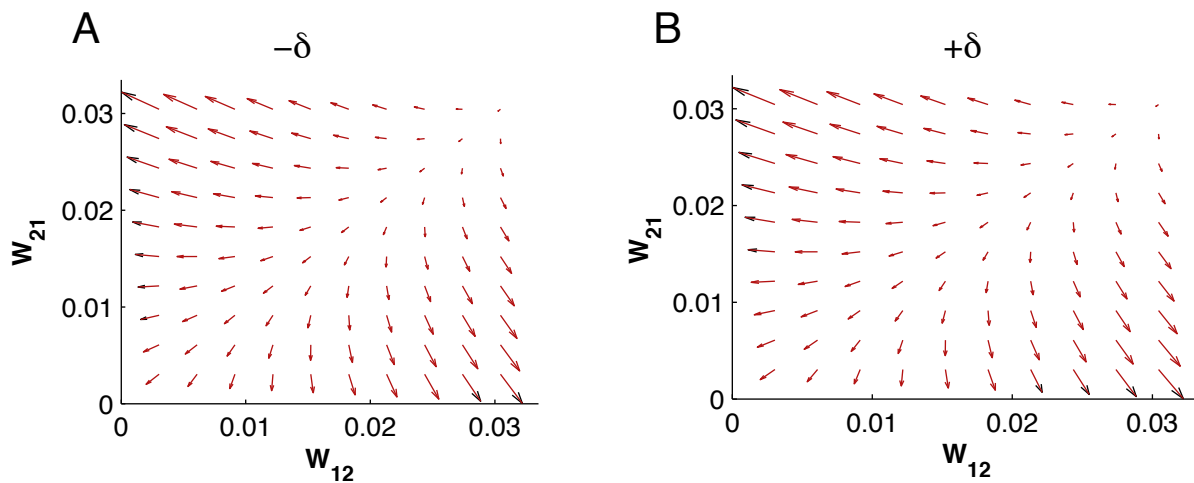


## Supplemental Material S3 Fig: Balanced STDP in isolated pairs of neurons



**Figure 1. Both types of balanced STDP lead to splitting of synaptic weights.** We take an isolated pair of neurons with the same intrinsic and synaptic parameters as in the full network. The neurons are reciprocally connected and we plot the (A) The depression-dominated balanced STDP rule. (B) The potentiation-dominated balanced STDP rule. Both are exactly the same as in the main paper. We show the dynamics of the weights in a pair of neurons isolated from the network. In both cases, the reciprocal loop is eliminated and initial conditions determine which synaptic weight is potentiated and which depressed.