Simple vesicle recycling model

A simple two pool model of spontaneous vesicle recycling. It is a simplified version of the model published in **Sare et al 2005**

We assume two pools:

PlotlyBackend()

- u1: Vesicles currently in the resting state
- u2: Vesicles currently activated/merged with the the pre-synaptic membrane

in addition we have two parameters:

- α: activation/exocytosis rate of vesicles in u1
- β : recycling rate from the membrane back to the resting pool

```
vesicle_recycle! (generic function with 1 method)

Setting the initial state of the system

u0 = \begin{bmatrix} 1.0, & 0.0 \end{bmatrix}

t\_span = \begin{pmatrix} & 1: & 0.0 & \\ & 2: & 1200.0 & \\ & \end{pmatrix}

p = (\alpha = 0.008, & \beta = 0.5)

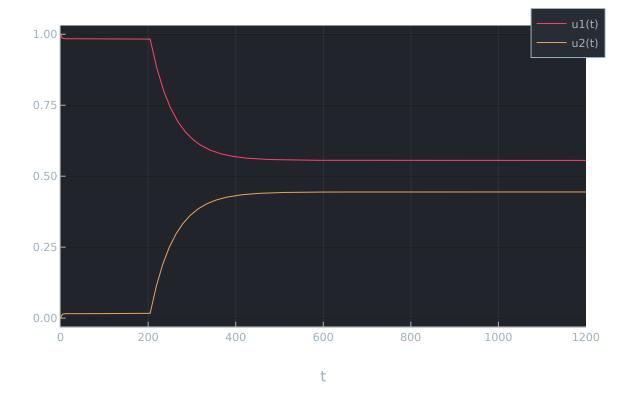
\alpha after LPA application: 0.008

\beta after LPA application: 0.01

time of LPA application: 0.01
```

ContinuousCallback(lpa_application (generic function with 1 method), affect! (generi

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