lag_1.xbe

Attributes

```
xbe name=lag_1 integrate=yes
# This is used to create a "lag".
# d_dt(y)=(1.0/tr)*(-y+x)
Jacobian: constant
input_vars: x
output_vars: y
aux_vars:
iparms:
sparms:
rparms:
+  tr=1
+  k=1
stparms: y_st=0
igparms: y_ig=0
outparms: x y
```

Description

`lag_1.xbe` is used to create a variable that lags the given variable. The real parameter `tr` determines the amount by which `y` lags `x`. The equation used is,

$$\frac{dy}{dt} = \frac{1}{T_r}(-y + x).$$

Fig. 1 shows typical waveforms obtained with `lag_1.xbe`.

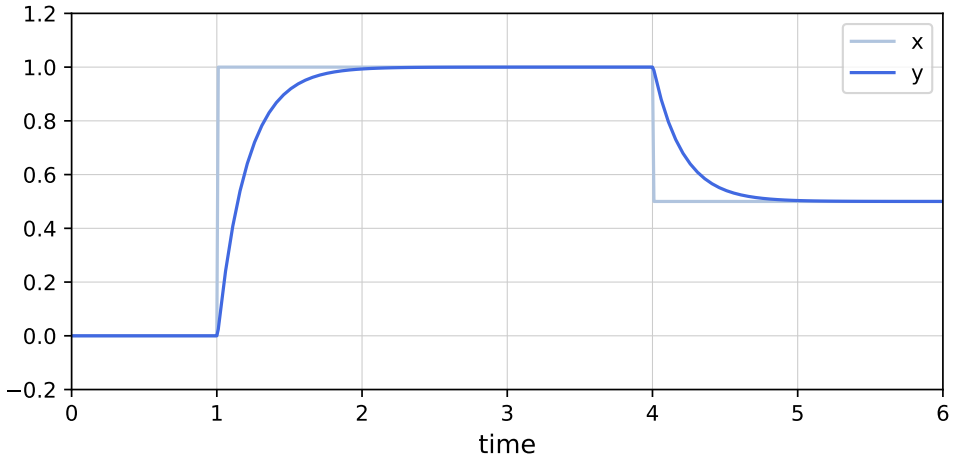

Figure 1: Waveforms obtained with `lag_1.xbe`, with `tr` = 0.2.