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,

$$\frac{dy}{dt} = \frac{1}{T_r}(-y + x).$$
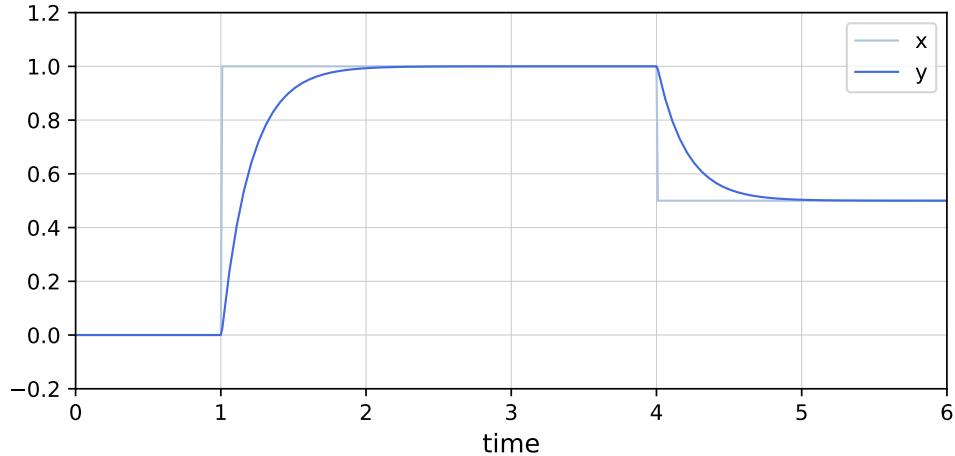
Fig. 1 shows waveforms obtained with lag_1.xbe.

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