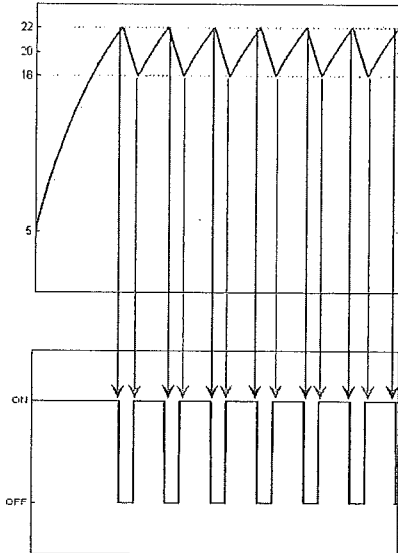


EXAMPLE: THERMOSTAT

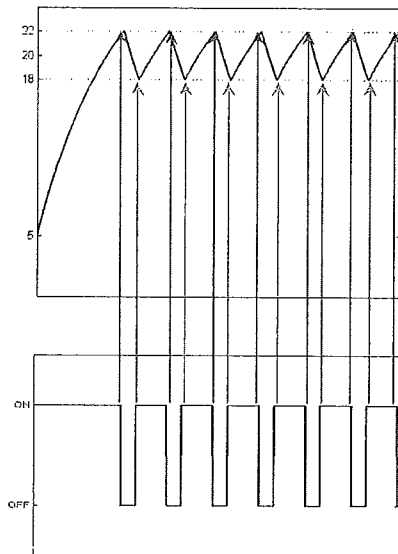


evolution of the temperature x
starting from the initial condition
 $x(0) = 5$ with the heater ON

x generates the events
causing a transition
from OFF to ON $x \leq 18$
from ON to OFF $x \geq 22$

evolution of the heater status
starting from the initial condition
 $x(0) = 5$ with the heater ON

EXAMPLE: THERMOSTAT

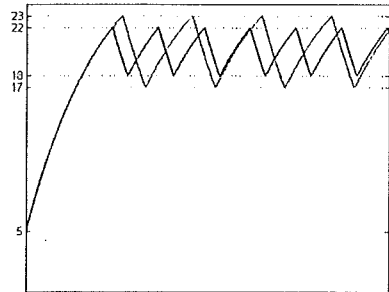


evolution of the temperature x
starting from the initial condition
 $x(0) = 5$ with the heater ON

A heater transition
causes a switch in the
dynamics governing x

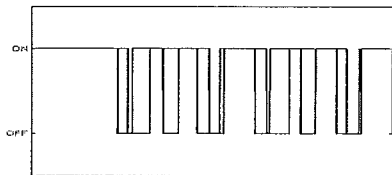
evolution of the heater status
starting from the initial condition
 $x(0) = 5$ with the heater ON

EXAMPLE: THERMOSTAT



evolution of the temperature x
starting from the initial condition
 $x(0) = 5$ with the heater ON

multiple executions starting from
an initial condition
→ Non-deterministic hybrid system



evolution of the heater status
starting from the initial condition
 $x(0) = 5$ with the heater ON