

Example 1:

First order kinetic process,  $A \rightarrow B$ :

Process rate proportional to concentration of A:  $\frac{d}{dt} A = k \cdot A$

ODE Input:

Initial concentration:  $A_0 := 0.2$

Output time step:  $dt := 20$

Rate constant:  $k := -0.005$

$D(t, A) := k \cdot A$        $t_{min} := 0$        $t_{max} := 400$

$N := \frac{t_{max} - t_{min}}{dt} = 20$

$A := \text{al\_rkckadapt}(A_0, t_{min}, t_{max}, N-1, D)$

