

**Table 1:** Numerical maximum errors obtained for example 1 at  $t = 1$  with  $\alpha = 0.6$ .

$\Delta x$	$\Delta t$	Finite volume method	method Scheme 1		method Scheme 2	
		$L_\infty$	$C$	$L_\infty$	$C$	$L_\infty$
1/10	$10^{-1}$	<i>inf</i>	–	<i>inf</i>	0.3	$2.382 \times 10^{-2}$
	$10^{-2}$	$1.080 \times 10^{-1}$	0.21	$1.674 \times 10^{-1}$	0.54	$3.529 \times 10^{-2}$
	$10^{-3}$	$1.095 \times 10^{-1}$	0.54	$5.497 \times 10^{-2}$	0.6	$5.311 \times 10^{-2}$
	$10^{-4}$	$1.096 \times 10^{-1}$	0.55	$5.319 \times 10^{-2}$	0.6	$5.464 \times 10^{-2}$

**Table 2:** Numerical maximum errors obtained for example 1 at  $t = 1$  with  $\alpha = 0.9$ .

$\Delta x$	$\Delta t$	Finite volume method	method Scheme 1		method Scheme 2	
		$L_\infty$	$C$	$L_\infty$	$C$	$L_\infty$
1/10	$10^{-1}$	<i>inf</i>	–	<i>inf</i>	0.3	$2.382 \times 10^{-2}$
	$10^{-2}$	$1.080 \times 10^{-1}$	0.21	$1.674 \times 10^{-1}$	0.54	$3.529 \times 10^{-2}$
	$10^{-3}$	$1.095 \times 10^{-1}$	0.54	$5.497 \times 10^{-2}$	0.6	$5.311 \times 10^{-2}$
	$10^{-4}$	$1.096 \times 10^{-1}$	0.55	$5.319 \times 10^{-2}$	0.6	$5.464 \times 10^{-2}$

We solve this example with two methods presented in this paper and the Finite volume method with several values of  $\Delta x$ ,  $\Delta t$  and  $C$  at  $T = 1$ . [Table 1](#) and [Table 2](#) show the error norms.