

Table 1: Report on the L_1 errors of the S¹IIOE(stabilized) and the FLIIOE(flux limited) schemes for a smooth hump, $\tau = h$.

n	S ¹ IIOE L ₁ error	S ¹ IIOE EOC	FLIIOE L ₁ error	FLIIOE EOC
40	9.82 10 ⁻²		7.51 10 ⁻²	
80	3.38 10 ⁻²	1.54	2.66 10 ⁻²	1.50
160	1.01 10 ⁻²	1.74	7.55 10 ⁻³	1.82
320	2.73 10 ⁻³	1.89	1.96 10 ⁻³	1.95
640	7.11 10 ⁻⁴	1.94	5.22 10 ⁻⁴	1.91
1280	1.83 10 ⁻⁴	1.96	1.41 10 ⁻⁴	1.89

Table 2: Report on the L_1 errors of the S¹IIOE(stabilized) and the FLIIOE(flux limited) schemes for a discontinuous piecewise profile, $\tau = h$.

n	S ¹ IIOE L ₁ error	S ¹ IIOE EOC	FLIIOE L ₁ error	FLIIOE EOC
40	2.03 10 ⁻¹		1.49 10 ⁻¹	
80	1.31 10 ⁻¹	0.63	9.4 10 ⁻²	0.66
160	8.38 10 ⁻²	0.64	5.91 10 ⁻²	0.67
320	5.35 10 ⁻²	0.65	3.72 10 ⁻²	0.67
640	3.41 10 ⁻²	0.65	2.35 10 ⁻²	0.66
1280	2.16 10 ⁻²	0.66	1.48 10 ⁻²	0.67

figures/compDisc.pdf

Figure 1: Comparing the HIOE scheme with the exact traveling-wave solution (??) in time $t = 0.24$ (left) and $t = 0.48$ (right), with $\sigma = 0.01$, $n = 100$, $\tau = 4h$