

In this tests we consider:

- $\psi(x) = -\exp(x) - (e - 3)x^3 - (5 - 2e)x^2 + x + 1$
- $\psi_l = 0$
- $\psi_{ll} = 0$
- $\psi_r = 0$
- $\psi_{rr} = 0$
- $g(x) = \exp(x)$
- the different PRO schemes are:
  - PRO1 — weak ( $R = A^\dagger B$ ) and degree  $d$
  - PRO2 — strong (constrained least squares) and degree  $d$
  - PRO3 — weak ( $R = A^\dagger B$ ) and degree  $d + 1$
  - PRO4 — strong (constrained least squares) and degree  $d + 1$
  - PRO5 — weak ( $R = A^\dagger B$ ) and degree  $d + 2$
  - PRO6 — strong (constrained least squares) and degree  $d + 2$

Table 1: Numerical results of the example with  $\omega = 1|1$ , and  $\omega = 1$ .

	$I$	$E_{\infty,0}$	$O_{\infty,0}$
$\mathbb{P}_3(4)$	20	2.60E-04	—
	40	3.35E-05	2.95
	80	4.14E-06	3.02
	160	4.90E-07	3.08
	320	5.37E-08	3.19
	640	5.07E-09	3.40