1 Dirichlet Conservation

- $E_{0,\infty} \rightarrow |\widehat{\phi} - \phi|$
- $E_{1,\infty} \rightarrow |\widehat{\phi}' - \phi'|$

Table 1: Results of the reconstruction in the Dirichlet B. (α=0); $\phi(x) = \exp(x)$.

x_f	d=1		d=2		d=3		d=4		d=5	
	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$
1	0	—	0	—	0	—	0	—	0	—
0.5	0	—	0	—	0	—	0	—	0	—
0.25	0	—	0	—	0	—	0	—	0	—
0.125	0	—	0	—	0	—	0	—	0	—
0.0625	0	—	0	—	0	—	0	—	0	—

Table 2: Results of the reconstruction in the Dirichlet B. - derivative (α=0); $\phi(x) = \exp(x)$.

x_f	d=1		d=2		d=3		d=4		d=5	
	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$
1	4.54E−01	—	7.56E−02	—	8.85E−03	—	6.24E−04	—	3.87E−05	—
0.5	1.98E−01	1.19	1.59E−02	2.25	9.09E−04	3.28	3.18E−05	4.29	9.76E−07	5.31
0.25	9.31E−02	1.09	3.67E−03	2.12	1.03E−04	3.14	1.80E−06	4.14	2.75E−08	5.15
0.125	4.51E−02	1.05	8.80E−04	2.06	1.23E−05	3.07	1.07E−07	4.07	8.14E−10	5.08
0.0625	2.22E−02	1.02	2.16E−04	2.03	1.50E−06	3.03	6.51E−09	4.04	2.48E−11	5.04

Table 3: Results of the reconstruction in the Dirichlet B. ($\alpha = h$); $\phi(x) = \exp(x)$.

x_f	d=1		d=2		d=3		d=4		d=5	
	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$
1	9.70E−02	—	7.04E−03	—	3.08E−04	—	1.49E−05	—	5.31E−07	—
0.5	1.17E−02	3.06	4.05E−04	4.12	8.47E−06	5.18	2.04E−07	6.19	3.56E−09	7.22
0.25	1.42E−03	3.04	2.44E−05	4.06	2.49E−07	5.09	2.99E−09	6.09	2.59E−11	7.10
0.125	1.74E−04	3.02	1.49E−06	4.03	7.56E−09	5.04	4.54E−11	6.04	1.95E−13	7.05
0.0625	2.16E−05	3.01	9.26E−08	4.01	2.33E−10	5.02	6.99E−13	6.02	1.55E−15	—

Table 4: Results of the reconstruction in the Dirichlet B. - derivative ($\alpha = h$); $\phi(x) = \exp(x)$.

x_f	d=1		d=2		d=3		d=4		d=5	
	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$
1	2.73E−01	—	3.65E−02	—	5.63E−03	—	3.73E−04	—	2.58E−05	—
0.5	1.56E−01	0.81	1.15E−02	1.66	7.35E−04	2.94	2.50E−05	3.90	8.05E−07	5.00
0.25	8.29E−02	0.91	3.14E−03	1.87	9.31E−05	2.98	1.60E−06	3.97	2.50E−08	5.01
0.125	4.26E−02	0.96	8.16E−04	1.94	1.17E−05	2.99	1.01E−07	3.99	7.77E−10	5.01
0.0625	2.16E−02	0.98	2.08E−04	1.97	1.47E−06	3.00	6.33E−09	3.99	2.42E−11	5.01

Table 5: Results of the reconstruction in the Dirichlet B. ($\alpha = 0.5$); $\phi(x) = \exp(x)$.

x_f	d=1		d=2		d=3		d=4		d=5	
	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$
1	9.70E−02	—	9.88E−03	—	6.56E−04	—	3.65E−05	—	1.65E−06	—
0.5	2.21E−02	2.14	1.07E−03	3.21	3.42E−05	4.26	9.42E−07	5.28	2.10E−08	6.30
0.25	5.28E−03	2.06	1.24E−04	3.10	1.96E−06	4.13	2.68E−08	5.14	2.97E−10	6.15
0.125	1.29E−03	2.03	1.50E−05	3.05	1.17E−07	4.06	7.99E−10	5.07	4.41E−12	6.07
0.0625	3.20E−04	2.01	1.85E−06	3.02	7.16E−09	4.03	2.44E−11	5.03	6.71E−14	6.04

Table 6: Results of the reconstruction in the Dirichlet B. - derivative ($\alpha = 0.5$); $\phi(x) = \exp(x)$.

x_f	d=1		d=2		d=3		d=4		d=5	
	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$
1	2.73E−01	—	2.02E−02	—	1.80E−03	—	2.49E−07	—	1.89E−06	—
0.5	1.17E−01	1.23	4.04E−03	2.32	1.78E−04	3.34	2.64E−07	↑	5.36E−08	5.14
0.25	5.39E−02	1.11	9.03E−04	2.16	1.98E−05	3.17	2.24E−08	3.56	1.59E−09	5.07
0.125	2.60E−02	1.05	2.14E−04	2.08	2.34E−06	3.08	1.56E−09	3.84	4.86E−11	5.04
0.0625	1.27E−02	1.03	5.19E−05	2.04	2.84E−07	3.04	1.02E−10	3.93	1.51E−12	5.01

Table 7: Results of the reconstruction in the Dirichlet B. (α=0); $\phi(x) = x^5$.

x_f	d=1		d=2		d=3		d=4		d=5	
	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$
1	0	—	0	—	0	—	0	—	0	—
0.5	0	—	0	—	0	—	0	—	0	—
0.25	0	—	0	—	0	—	0	—	0	—
0.125	0	—	0	—	0	—	0	—	0	—
0.0625	0	—	0	—	0	—	0	—	0	—

Table 8: Results of the reconstruction in the Dirichlet B. - derivative (α=0); $\phi(x) = x^5$.

x_f	d=1		d=2		d=3		d=4		d=5	
	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$
1	2.85E−01	—	4.19E−01	—	2.70E−01	—	5.00E−02	—	1.17E−15	—
0.5	1.78E−02	4.00	2.62E−02	4.00	1.69E−02	4.00	3.12E−03	4.00	7.31E−17	—
0.25	1.11E−03	4.00	1.64E−03	4.00	1.06E−03	4.00	1.95E−04	4.00	4.57E−18	—
0.125	6.96E−05	4.00	1.02E−04	4.00	6.60E−05	4.00	1.22E−05	4.00	2.86E−19	—
0.0625	4.35E−06	4.00	6.39E−06	4.00	4.13E−06	4.00	7.62E−07	4.00	1.79E−20	—

Table 9: Results of the reconstruction in the Dirichlet B. ($\alpha = h$); $\phi(x) = x^5$.

x_f	d=1		d=2		d=3		d=4		d=5	
	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$
1	4.69E−02	—	3.49E−02	—	9.19E−03	—	1.20E−03	—	3.01E−18	—
0.5	8.96E−04	5.71	6.23E−04	5.81	1.55E−04	5.89	2.01E−05	5.91	4.15E−19	—
0.25	1.56E−05	5.85	1.05E−05	5.89	2.53E−06	5.94	3.26E−07	5.95	4.04E−21	—
0.125	2.57E−07	5.92	1.70E−07	5.94	4.04E−08	5.97	5.19E−09	5.97	3.91E−23	—
0.0625	4.13E−09	5.96	2.72E−09	5.97	6.38E−10	5.98	8.19E−11	5.99	5.82E−26	—

Table 10: Results of the reconstruction in the Dirichlet B. - derivative ($\alpha = h$); $\phi(x) = x^5$.

x_f	d=1		d=2		d=3		d=4		d=5	
	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$
1	1.91E−01	—	2.17E−01	—	1.73E−01	—	2.99E−02	—	1.61E−16	—
0.5	1.43E−02	3.74	1.91E−02	3.51	1.37E−02	3.66	2.46E−03	3.60	9.91E−17	—
0.25	9.95E−04	3.85	1.40E−03	3.77	9.52E−04	3.84	1.74E−04	3.82	4.00E−18	—
0.125	6.57E−05	3.92	9.46E−05	3.89	6.27E−05	3.92	1.15E−05	3.91	1.59E−19	—
0.0625	4.23E−06	3.96	6.15E−06	3.94	4.02E−06	3.96	7.41E−07	3.96	9.49E−22	—

Table 11: Results of the reconstruction in the Dirichlet B. ($\alpha = 0.5$); $\phi(x) = x^5$.

x_f	d=1		d=2		d=3		d=4		d=5	
	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$
1	4.69E−02	—	4.65E−02	—	1.89E−02	—	3.00E−03	—	6.23E−17	—
0.5	1.46E−03	5.00	1.45E−03	5.00	5.92E−04	5.00	9.38E−05	5.00	1.18E−18	—
0.25	4.58E−05	5.00	4.54E−05	5.00	1.85E−05	5.00	2.93E−06	5.00	6.80E−20	—
0.125	1.43E−06	5.00	1.42E−06	5.00	5.78E−07	5.00	9.16E−08	5.00	3.87E−23	—
0.0625	4.47E−08	5.00	4.43E−08	5.00	1.81E−08	5.00	2.86E−09	5.00	2.85E−23	—

Table 12: Results of the reconstruction in the Dirichlet B. - derivative ($\alpha = 0.5$); $\phi(x) = x^5$.

x_f	d=1		d=2		d=3		d=4		d=5	
	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$
1	1.91E−01	—	1.45E−01	—	6.32E−02	—	8.36E−04	—	8.70E−16	—
0.5	1.20E−02	4.00	9.09E−03	4.00	3.95E−03	4.00	5.22E−05	4.00	2.60E−17	—
0.25	7.48E−04	4.00	5.68E−04	4.00	2.47E−04	4.00	3.27E−06	4.00	1.67E−18	—
0.125	4.67E−05	4.00	3.55E−05	4.00	1.54E−05	4.00	2.04E−07	4.00	9.76E−21	—
0.0625	2.92E−06	4.00	2.22E−06	4.00	9.64E−07	4.00	1.28E−08	4.00	1.62E−21	—

Table 13: Results of the reconstruction in the Dirichlet B. (α=0); $\phi(x) = (1+x)^5$.

x_f	d=1		d=2		d=3		d=4		d=5	
	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$
1	0	—	0	—	0	—	0	—	0	—
0.5	0	—	0	—	0	—	0	—	0	—
0.25	0	—	0	—	0	—	0	—	0	—
0.125	0	—	0	—	0	—	0	—	0	—
0.0625	0	—	0	—	0	—	0	—	0	—

Table 14: Results of the reconstruction in the Dirichlet B. - derivative (α=0); $\phi(x) = (1+x)^5$.

x_f	d=1		d=2		d=3		d=4		d=5	
	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$
1	1.43E+01	—	5.75E+00	—	9.92E−01	—	5.00E−02	—	1.78E−15	—
0.5	5.04E+00	1.51	1.10E+00	2.39	1.07E−01	3.21	3.12E−03	4.00	5.33E−15	—
0.25	2.10E+00	1.26	2.37E−01	2.21	1.23E−02	3.12	1.95E−04	4.00	3.55E−15	—
0.125	9.59E−01	1.13	5.49E−02	2.11	1.48E−03	3.06	1.22E−05	4.00	4.44E−15	—
0.0625	4.58E−01	1.07	1.32E−02	2.06	1.80E−04	3.03	7.62E−07	4.00	2.66E−15	—

Table 15: Results of the reconstruction in the Dirichlet B. ($\alpha = h$); $\phi(x) = (1+x)^5$.

x_f	d=1		d=2		d=3		d=4		d=5	
	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$
1	2.75E+00	—	5.26E−01	—	3.46E−02	—	1.20E−03	—	4.44E−16	—
0.5	2.86E−01	3.27	2.78E−02	4.24	9.98E−04	5.11	2.01E−05	5.91	0	—
0.25	3.17E−02	3.17	1.57E−03	4.14	2.98E−05	5.07	3.26E−07	5.95	0	—
0.125	3.69E−03	3.10	9.32E−05	4.08	9.06E−07	5.04	5.19E−09	5.97	0	—
0.0625	4.44E−04	3.05	5.66E−06	4.04	2.79E−08	5.02	8.19E−11	5.99	0	—

Table 16: Results of the reconstruction in the Dirichlet B. - derivative ($\alpha = h$); $\phi(x) = (1+x)^5$.

x_f	d=1		d=2		d=3		d=4		d=5	
	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$
1	9.07E+00	—	2.81E+00	—	6.31E−01	—	2.99E−02	—	1.15E−14	—
0.5	3.98E+00	1.19	7.95E−01	1.82	8.66E−02	2.87	2.46E−03	3.60	7.99E−15	—
0.25	1.87E+00	1.09	2.03E−01	1.97	1.11E−02	2.96	1.74E−04	3.82	4.44E−15	—
0.125	9.06E−01	1.05	5.09E−02	2.00	1.40E−03	2.99	1.15E−05	3.91	4.09E−14	↑
0.0625	4.45E−01	1.02	1.27E−02	2.00	1.76E−04	3.00	7.41E−07	3.96	3.02E−14	0.44

Table 17: Results of the reconstruction in the Dirichlet B. ($\alpha = 0.5$); $\phi(x) = (1+x)^5$.

x_f	d=1		d=2		d=3		d=4		d=5	
	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$
1	2.75E+00	—	7.32E−01	—	7.40E−02	—	3.00E−03	—	1.44E−15	—
0.5	5.22E−01	2.40	7.22E−02	3.34	4.04E−03	4.20	9.38E−05	5.00	1.67E−15	—
0.25	1.15E−01	2.19	7.95E−03	3.18	2.34E−04	4.11	2.93E−06	5.00	4.44E−16	—
0.125	2.69E−02	2.09	9.31E−04	3.09	1.40E−05	4.06	9.16E−08	5.00	2.22E−16	—
0.0625	6.54E−03	2.04	1.13E−04	3.05	8.59E−07	4.03	2.86E−09	5.00	2.22E−16	—

Table 18: Results of the reconstruction in the Dirichlet B. - derivative ($\alpha = 0.5$); $\phi(x) = (1+x)^5$.

x_f	d=1		d=2		d=3		d=4		d=5	
	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$
1	9.07E+00	—	1.62E+00	—	1.99E−01	—	8.36E−04	—	1.60E−14	—
0.5	3.07E+00	1.56	2.91E−01	2.48	2.09E−02	3.25	5.22E−05	4.00	2.66E−14	↑
0.25	1.25E+00	1.30	6.00E−02	2.28	2.37E−03	3.14	3.27E−06	4.00	7.99E−15	—
0.125	5.59E−01	1.16	1.35E−02	2.15	2.80E−04	3.08	2.04E−07	4.00	1.95E−14	↑
0.0625	2.64E−01	1.08	3.20E−03	2.08	3.41E−05	3.04	1.28E−08	4.00	1.78E−14	0.14

Table 19: Results of the reconstruction in the Dirichlet B. (α=0); $\phi(x) = x^2$.

x_f	d=1		d=2		d=3		d=4		d=5	
	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$
1	0	—	0	—	0	—	0	—	0	—
0.5	0	—	0	—	0	—	0	—	0	—
0.25	0	—	0	—	0	—	0	—	0	—
0.125	0	—	0	—	0	—	0	—	0	—
0.0625	0	—	0	—	0	—	0	—	0	—

Table 20: Results of the reconstruction in the Dirichlet B. - derivative (α=0); $\phi(x) = x^2$.

x_f	d=1		d=2		d=3		d=4		d=5	
	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$
1	7.00E−01	—	1.62E−16	—	1.65E−16	—	3.41E−15	—	1.61E−15	—
0.5	3.50E−01	1.00	8.09E−17	—	8.24E−17	—	1.71E−15	—	8.06E−16	—
0.25	1.75E−01	1.00	4.04E−17	—	4.12E−17	—	8.54E−16	—	4.03E−16	—
0.125	8.75E−02	1.00	2.02E−17	—	2.06E−17	—	4.27E−16	—	2.02E−16	—
0.0625	4.37E−02	1.00	1.01E−17	—	1.03E−17	—	2.13E−16	—	1.01E−16	—

Table 21: Results of the reconstruction in the Dirichlet B. ($\alpha = h$); $\phi(x) = x^2$.

x_f	d=1		d=2		d=3		d=4		d=5	
	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$
1	1.62E−01	—	2.08E−17	—	4.12E−18	—	2.26E−17	—	1.45E−17	—
0.5	2.10E−02	2.95	3.25E−18	—	2.56E−18	—	1.50E−18	—	5.04E−18	—
0.25	2.68E−03	2.97	1.29E−19	—	7.50E−19	—	7.05E−19	—	3.15E−19	—
0.125	3.38E−04	2.99	1.11E−19	—	3.66E−20	—	9.42E−21	—	6.11E−20	—
0.0625	4.25E−05	2.99	2.08E−20	—	1.09E−20	—	1.98E−20	—	9.40E−22	—

Table 22: Results of the reconstruction in the Dirichlet B. - derivative ($\alpha = h$); $\phi(x) = x^2$.

x_f	d=1		d=2		d=3		d=4		d=5	
	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$
1	4.00E−01	—	1.57E−16	—	1.07E−16	—	6.42E−16	—	7.40E−16	—
0.5	2.74E−01	0.55	1.11E−16	—	2.44E−16	—	2.07E−16	—	1.19E−15	—
0.25	1.56E−01	0.81	1.99E−17	—	2.90E−16	—	3.89E−16	—	3.16E−16	—
0.125	8.27E−02	0.91	6.29E−17	—	5.72E−17	—	2.17E−17	—	2.48E−16	—
0.0625	4.25E−02	0.96	4.77E−17	—	6.95E−17	—	1.81E−16	—	1.52E−17	—

Table 23: Results of the reconstruction in the Dirichlet B. ($\alpha = 0.5$); $\phi(x) = x^2$.

x_f	d=1		d=2		d=3		d=4		d=5	
	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$
1	1.62E−01	—	1.04E−17	—	5.20E−18	—	3.64E−17	—	5.64E−17	—
0.5	4.06E−02	2.00	3.47E−18	—	2.56E−17	—	1.47E−17	—	1.53E−17	—
0.25	1.02E−02	2.00	2.17E−18	—	1.63E−18	—	2.60E−18	—	7.45E−18	—
0.125	2.54E−03	2.00	9.76E−19	—	8.94E−19	—	2.86E−18	—	6.57E−19	—
0.0625	6.35E−04	2.00	2.71E−20	—	0	—	3.05E−19	—	3.05E−19	—

Table 24: Results of the reconstruction in the Dirichlet B. - derivative ($\alpha = 0.5$); $\phi(x) = x^2$.

x_f	d=1		d=2		d=3		d=4		d=5	
	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$
1	4.00E−01	—	8.24E−17	—	6.94E−17	—	2.57E−16	—	1.39E−16	—
0.5	2.00E−01	1.00	4.68E−17	—	3.84E−16	—	1.87E−16	—	2.99E−16	—
0.25	1.00E−01	1.00	3.85E−17	—	6.19E−17	—	6.30E−17	—	1.98E−16	—
0.125	5.00E−02	1.00	3.45E−17	—	5.01E−17	—	1.31E−16	—	6.99E−17	—
0.0625	2.50E−02	1.00	4.59E−18	—	5.74E−20	—	2.58E−17	—	4.77E−17	—

2 Neumann Conservation

Table 25: Results of the reconstruction in the Neumann B. (α=0); $\phi(x) = \exp(x)$.

x_f	d=1		d=2		d=3		d=4		d=5	
	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$
1	2.01E−01	—	1.16E−02	—	7.05E−04	—	3.23E−05	—	1.40E−06	—
0.5	4.41E−02	2.19	1.23E−03	3.24	3.64E−05	4.28	8.27E−07	5.29	1.77E−08	6.30
0.25	1.04E−02	2.09	1.42E−04	3.12	2.07E−06	4.13	2.34E−08	5.14	2.49E−10	6.15
0.125	2.51E−03	2.04	1.70E−05	3.06	1.24E−07	4.07	6.97E−10	5.07	3.70E−12	6.07
0.0625	6.19E−04	2.02	2.09E−06	3.03	7.56E−09	4.03	2.13E−11	5.03	5.57E−14	6.05

Table 26: Results of the reconstruction in the Neumann B. - derivative (α=0); $\phi(x) = \exp(x)$.

x_f	d=1		d=2		d=3		d=4		d=5	
	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$
1	0	—	0	—	0	—	0	—	0	—
0.5	0	—	0	—	0	—	0	—	0	—
0.25	0	—	0	—	0	—	0	—	0	—
0.125	0	—	0	—	0	—	0	—	0	—
0.0625	0	—	0	—	0	—	0	—	0	—

Table 27: Results of the reconstruction in the Neumann B. ($\alpha = h$); $\phi(x) = \exp(x)$.

x_f	d=1		d=2		d=3		d=4		d=5	
	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$
1	3.11E−01	—	1.84E−02	—	9.45E−04	—	4.42E−05	—	1.80E−06	—
0.5	5.92E−02	2.39	1.63E−03	3.50	4.30E−05	4.46	9.86E−07	5.49	2.03E−08	6.47
0.25	1.23E−02	2.27	1.66E−04	3.30	2.27E−06	4.25	2.57E−08	5.26	2.68E−10	6.24
0.125	2.76E−03	2.16	1.85E−05	3.16	1.30E−07	4.13	7.32E−10	5.14	3.84E−12	6.13
0.0625	6.50E−04	2.09	2.18E−06	3.09	7.74E−09	4.07	2.18E−11	5.07	5.64E−14	6.09

Table 28: Results of the reconstruction in the Neumann B. - derivative ($\alpha = h$); $\phi(x) = \exp(x)$.

x_f	d=1		d=2		d=3		d=4		d=5	
	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$
1	2.21E−01	—	3.85E−02	—	2.56E−03	—	1.95E−04	—	9.31E−06	—
0.5	6.06E−02	1.87	4.46E−03	3.11	1.39E−04	4.20	5.20E−06	5.23	1.22E−07	6.26
0.25	1.55E−02	1.97	5.35E−04	3.06	8.14E−06	4.10	1.50E−07	5.11	1.75E−09	6.13
0.125	3.90E−03	1.99	6.54E−05	3.03	4.92E−07	4.05	4.51E−09	5.06	2.61E−11	6.06
0.0625	9.76E−04	2.00	8.08E−06	3.02	3.02E−08	4.02	1.38E−10	5.03	3.98E−13	6.04

Table 29: Results of the reconstruction in the Neumann B. ($\alpha = 0.5$); $\phi(x) = \exp(x)$.

x_f	d=1		d=2		d=3		d=4		d=5	
	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$
1	3.11E−01	—	2.15E−02	—	1.27E−03	—	6.54E−05	—	2.84E−06	—
0.5	7.34E−02	2.08	2.37E−03	3.18	6.69E−05	4.25	1.70E−06	5.27	3.63E−08	6.29
0.25	1.79E−02	2.03	2.79E−04	3.09	3.85E−06	4.12	4.85E−08	5.13	5.15E−10	6.14
0.125	4.44E−03	2.02	3.38E−05	3.04	2.31E−07	4.06	1.45E−09	5.06	7.66E−12	6.07
0.0625	1.10E−03	2.01	4.17E−06	3.02	1.41E−08	4.03	4.43E−11	5.03	1.17E−13	6.03

Table 30: Results of the reconstruction in the Neumann B. - derivative ($\alpha = 0.5$); $\phi(x) = \exp(x)$.

x_f	d=1		d=2		d=3		d=4		d=5	
	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$
1	2.21E−01	—	5.61E−02	—	6.06E−03	—	5.43E−04	—	3.38E−05	—
0.5	1.18E−01	0.91	1.28E−02	2.13	6.53E−04	3.22	2.85E−05	4.25	8.72E−07	5.28
0.25	6.06E−02	0.96	3.08E−03	2.06	7.60E−05	3.10	1.64E−06	4.12	2.48E−08	5.14
0.125	3.08E−02	0.98	7.54E−04	2.03	9.17E−06	3.05	9.83E−08	4.06	7.41E−10	5.07
0.0625	1.55E−02	0.99	1.87E−04	2.01	1.13E−06	3.03	6.02E−09	4.03	2.26E−11	5.03

Table 31: Results of the reconstruction in the Neumann B. (α=0); $\phi(x) = x^5$.

x_f	d=1		d=2		d=3		d=4		d=5	
	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$
1	1.19E−01	—	6.16E−02	—	2.12E−02	—	2.61E−03	—	3.52E−17	—
0.5	3.72E−03	5.00	1.92E−03	5.00	6.62E−04	5.00	8.16E−05	5.00	1.10E−18	—
0.25	1.16E−04	5.00	6.01E−05	5.00	2.07E−05	5.00	2.55E−06	5.00	3.44E−20	—
0.125	3.64E−06	5.00	1.88E−06	5.00	6.46E−07	5.00	7.97E−08	5.00	1.08E−21	—
0.0625	1.14E−07	5.00	5.87E−08	5.00	2.02E−08	5.00	2.49E−09	5.00	3.36E−23	—

Table 32: Results of the reconstruction in the Neumann B. - derivative (α=0); $\phi(x) = x^5$.

x_f	d=1		d=2		d=3		d=4		d=5	
	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$
1	0	—	0	—	0	—	0	—	0	—
0.5	0	—	0	—	0	—	0	—	0	—
0.25	0	—	0	—	0	—	0	—	0	—
0.125	0	—	0	—	0	—	0	—	0	—
0.0625	0	—	0	—	0	—	0	—	0	—

Table 33: Results of the reconstruction in the Neumann B. ($\alpha = h$); $\phi(x) = x^5$.

x_f	d=1		d=2		d=3		d=4		d=5	
	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$
1	1.09E−01	—	8.12E−02	—	2.73E−02	—	3.62E−03	—	1.36E−16	—
0.5	3.70E−03	4.88	2.26E−03	5.17	7.61E−04	5.16	9.77E−05	5.21	1.32E−19	—
0.25	1.16E−04	4.99	6.57E−05	5.11	2.23E−05	5.10	2.81E−06	5.12	8.72E−21	—
0.125	3.64E−06	5.00	1.97E−06	5.06	6.71E−07	5.05	8.37E−08	5.07	2.81E−21	—
0.0625	1.14E−07	5.00	6.02E−08	5.03	2.06E−08	5.03	2.55E−09	5.03	1.11E−22	—

Table 34: Results of the reconstruction in the Neumann B. - derivative ($\alpha = h$); $\phi(x) = x^5$.

x_f	d=1		d=2		d=3		d=4		d=5	
	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$
1	1.95E−02	—	1.16E−01	—	6.66E−02	—	1.64E−02	—	1.84E−18	—
0.5	7.63E−05	8.00	3.97E−03	4.87	2.16E−03	4.95	5.23E−04	4.97	4.10E−18	—
0.25	2.98E−07	8.00	1.31E−04	4.93	6.87E−05	4.97	1.65E−05	4.99	6.14E−20	—
0.125	1.16E−09	8.00	4.19E−06	4.96	2.17E−06	4.99	5.19E−07	4.99	5.88E−21	—
0.0625	4.55E−12	8.00	1.33E−07	4.98	6.81E−08	4.99	1.62E−08	5.00	1.98E−23	—

Table 35: Results of the reconstruction in the Neumann B. ($\alpha = 0.5$); $\phi(x) = x^5$.

x_f	d=1		d=2		d=3		d=4		d=5	
	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$
1	1.09E−01	—	8.87E−02	—	3.48E−02	—	5.45E−03	—	1.36E−17	—
0.5	3.42E−03	5.00	2.77E−03	5.00	1.09E−03	5.00	1.70E−04	5.00	1.09E−19	—
0.25	1.07E−04	5.00	8.66E−05	5.00	3.40E−05	5.00	5.33E−06	5.00	4.37E−20	—
0.125	3.34E−06	5.00	2.71E−06	5.00	1.06E−06	5.00	1.66E−07	5.00	1.95E−21	—
0.0625	1.04E−07	5.00	8.46E−08	5.00	3.32E−08	5.00	5.20E−09	5.00	3.62E−23	—

Table 36: Results of the reconstruction in the Neumann B. - derivative ($\alpha = 0.5$); $\phi(x) = x^5$.

x_f	d=1		d=2		d=3		d=4		d=5	
	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$
1	1.95E−02	—	1.61E−01	—	1.50E−01	—	4.63E−02	—	6.01E−17	—
0.5	1.22E−03	4.00	1.01E−02	4.00	9.40E−03	4.00	2.90E−03	4.00	7.73E−19	—
0.25	7.63E−05	4.00	6.28E−04	4.00	5.88E−04	4.00	1.81E−04	4.00	6.84E−19	—
0.125	4.77E−06	4.00	3.93E−05	4.00	3.67E−05	4.00	1.13E−05	4.00	1.61E−20	—
0.0625	2.98E−07	4.00	2.45E−06	4.00	2.30E−06	4.00	7.07E−07	4.00	2.16E−21	—

Table 37: Results of the reconstruction in the Neumann B. (α=0); $\phi(x) = (1+x)^5$.

x_f	d=1		d=2		d=3		d=4		d=5	
	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$
1	6.23E+00	—	8.78E−01	—	7.93E−02	—	2.61E−03	—	1.78E−15	—
0.5	1.11E+00	2.49	8.44E−02	3.38	4.29E−03	4.21	8.16E−05	5.00	8.88E−16	—
0.25	2.33E−01	2.25	9.15E−03	3.21	2.48E−04	4.12	2.55E−06	5.00	6.66E−16	—
0.125	5.33E−02	2.13	1.06E−03	3.11	1.48E−05	4.06	7.97E−08	5.00	6.66E−16	—
0.0625	1.28E−02	2.06	1.28E−04	3.05	9.07E−07	4.03	2.49E−09	5.00	7.77E−16	—

Table 38: Results of the reconstruction in the Neumann B. - derivative (α=0); $\phi(x) = (1+x)^5$.

x_f	d=1		d=2		d=3		d=4		d=5	
	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$
1	0	—	0	—	0	—	0	—	0	—
0.5	0	—	0	—	0	—	0	—	0	—
0.25	0	—	0	—	0	—	0	—	0	—
0.125	0	—	0	—	0	—	0	—	0	—
0.0625	0	—	0	—	0	—	0	—	0	—

Table 39: Results of the reconstruction in the Neumann B. ($\alpha = h$); $\phi(x) = (1+x)^5$.

x_f	d=1		d=2		d=3		d=4		d=5	
	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$
1	7.94E+00	—	1.35E+00	—	1.07E−01	—	3.62E−03	—	1.55E−15	—
0.5	1.39E+00	2.51	1.10E−01	3.61	5.07E−03	4.40	9.77E−05	5.21	2.00E−15	—
0.25	2.71E−01	2.36	1.07E−02	3.37	2.71E−04	4.23	2.81E−06	5.12	4.44E−16	—
0.125	5.82E−02	2.22	1.15E−03	3.21	1.55E−05	4.12	8.37E−08	5.07	1.11E−15	—
0.0625	1.34E−02	2.12	1.33E−04	3.11	9.28E−07	4.06	2.55E−09	5.03	1.22E−15	—

Table 40: Results of the reconstruction in the Neumann B. - derivative ($\alpha = h$); $\phi(x) = (1+x)^5$.

x_f	d=1		d=2		d=3		d=4		d=5	
	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$
1	3.42E+00	—	2.69E+00	—	2.93E−01	—	1.64E−02	—	8.88E−16	—
0.5	1.14E+00	1.59	2.93E−01	3.20	1.65E−02	4.15	5.23E−04	4.97	1.78E−15	—
0.25	3.05E−01	1.90	3.37E−02	3.12	9.73E−04	4.08	1.65E−05	4.99	0	—
0.125	7.77E−02	1.97	4.02E−03	3.07	5.90E−05	4.05	5.19E−07	4.99	8.88E−16	—
0.0625	1.95E−02	1.99	4.91E−04	3.03	3.62E−06	4.02	1.62E−08	5.00	8.88E−16	—

Table 41: Results of the reconstruction in the Neumann B. ($\alpha = 0.5$); $\phi(x) = (1+x)^5$.

x_f	d=1		d=2		d=3		d=4		d=5	
	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$
1	7.94E+00	—	1.56E+00	—	1.44E−01	—	5.45E−03	—	2.44E−15	—
0.5	1.63E+00	2.29	1.58E−01	3.30	7.91E−03	4.19	1.70E−04	5.00	2.22E−16	—
0.25	3.75E−01	2.12	1.77E−02	3.16	4.60E−04	4.10	5.33E−06	5.00	1.11E−16	—
0.125	9.06E−02	2.05	2.09E−03	3.08	2.77E−05	4.05	1.66E−07	5.00	2.22E−16	—
0.0625	2.23E−02	2.02	2.54E−04	3.04	1.70E−06	4.03	5.20E−09	5.00	4.44E−16	—

Table 42: Results of the reconstruction in the Neumann B. - derivative ($\alpha = 0.5$); $\phi(x) = (1+x)^5$.

x_f	d=1		d=2		d=3		d=4		d=5	
	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$
1	3.42E+00	—	3.87E+00	—	6.94E−01	—	4.63E−02	—	1.07E−14	—
0.5	2.07E+00	0.72	8.29E−01	2.22	7.74E−02	3.17	2.90E−03	4.00	6.22E−15	—
0.25	1.14E+00	0.86	1.92E−01	2.11	9.09E−03	3.09	1.81E−04	4.00	8.88E−16	—
0.125	5.96E−01	0.93	4.61E−02	2.06	1.10E−03	3.05	1.13E−05	4.00	1.07E−14	↑
0.0625	3.05E−01	0.97	1.13E−02	2.03	1.35E−04	3.02	7.07E−07	4.00	2.75E−14	↑

Table 43: Results of the reconstruction in the Neumann B. (α=0); $\phi(x) = x^2$.

x_f	d=1		d=2		d=3		d=4		d=5	
	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$
1	3.12E−01	—	7.20E−17	—	4.48E−17	—	8.57E−18	—	6.18E−17	—
0.5	7.81E−02	2.00	1.80E−17	—	1.12E−17	—	2.14E−18	—	1.54E−17	—
0.25	1.95E−02	2.00	4.50E−18	—	2.80E−18	—	5.36E−19	—	3.86E−18	—
0.125	4.88E−03	2.00	1.12E−18	—	7.01E−19	—	1.34E−19	—	9.66E−19	—
0.0625	1.22E−03	2.00	2.81E−19	—	1.75E−19	—	3.35E−20	—	2.41E−19	—

Table 44: Results of the reconstruction in the Neumann B. - derivative (α=0); $\phi(x) = x^2$.

x_f	d=1		d=2		d=3		d=4		d=5	
	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$
1	0	—	0	—	0	—	0	—	0	—
0.5	0	—	0	—	0	—	0	—	0	—
0.25	0	—	0	—	0	—	0	—	0	—
0.125	0	—	0	—	0	—	0	—	0	—
0.0625	0	—	0	—	0	—	0	—	0	—

Table 45: Results of the reconstruction in the Neumann B. ($\alpha = h$); $\phi(x) = x^2$.

x_f	d=1		d=2		d=3		d=4		d=5	
	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$
1	5.62E−01	—	5.55E−17	—	1.19E−16	—	1.63E−16	—	1.05E−16	—
0.5	1.09E−01	2.36	4.16E−17	—	4.87E−17	—	3.57E−17	—	4.26E−17	—
0.25	2.34E−02	2.22	1.21E−17	—	3.51E−18	—	4.48E−18	—	6.62E−19	—
0.125	5.37E−03	2.13	8.67E−19	—	2.50E−18	—	2.53E−18	—	3.03E−18	—
0.0625	1.28E−03	2.07	6.51E−19	—	4.10E−21	—	3.72E−19	—	1.58E−19	—

Table 46: Results of the reconstruction in the Neumann B. - derivative ($\alpha = h$); $\phi(x) = x^2$.

x_f	d=1		d=2		d=3		d=4		d=5	
	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$
1	5.00E−01	—	2.78E−17	—	8.33E−17	—	6.94E−17	—	2.05E−16	—
0.5	1.25E−01	2.00	1.39E−17	—	2.08E−17	—	1.04E−17	—	3.38E−17	—
0.25	3.13E−02	2.00	5.20E−18	—	6.07E−18	—	2.60E−18	—	5.64E−18	—
0.125	7.81E−03	2.00	8.67E−19	—	2.17E−19	—	1.63E−18	—	3.74E−18	—
0.0625	1.95E−03	2.00	3.25E−19	—	1.08E−19	—	1.06E−18	—	4.07E−19	—

Table 47: Results of the reconstruction in the Neumann B. ($\alpha = 0.5$); $\phi(x) = x^2$.

x_f	d=1		d=2		d=3		d=4		d=5	
	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$
1	5.62E−01	—	5.55E−17	—	9.53E−17	—	3.14E−16	—	3.77E−16	—
0.5	1.41E−01	2.00	1.39E−16	—	3.41E−18	—	1.68E−16	—	2.33E−18	—
0.25	3.52E−02	2.00	1.39E−17	—	1.04E−17	—	4.60E−17	—	1.16E−17	—
0.125	8.79E−03	2.00	1.39E−17	—	7.46E−18	—	7.41E−18	—	9.51E−18	—
0.0625	2.20E−03	2.00	6.94E−18	—	3.59E−18	—	1.02E−17	—	2.24E−18	—

Table 48: Results of the reconstruction in the Neumann B. - derivative ($\alpha = 0.5$); $\phi(x) = x^2$.

x_f	d=1		d=2		d=3		d=4		d=5	
	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$
1	5.00E−01	—	5.55E−17	—	0	—	8.60E−16	—	1.03E−15	—
0.5	2.50E−01	1.00	1.67E−16	—	4.16E−17	—	1.12E−15	—	6.94E−17	—
0.25	1.25E−01	1.00	1.39E−17	—	1.39E−17	—	4.58E−16	—	1.60E−16	—
0.125	6.25E−02	1.00	4.16E−17	—	4.51E−17	—	1.04E−17	—	2.86E−16	—
0.0625	3.13E−02	1.00	3.82E−17	—	9.89E−17	—	2.81E−16	—	1.65E−16	—

3 No Conservation

Table 49: Results of the reconstruction without restriction; $\phi(x) = \exp(x)$.

x_f	d=1		d=2		d=3		d=4		d=5	
	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$
1	1.32E−01	—	1.70E−02	—	1.37E−03	—	9.90E−05	—	5.12E−06	—
0.5	2.78E−02	2.25	1.75E−03	3.28	6.90E−05	4.31	2.49E−06	5.32	6.39E−08	6.32
0.25	6.37E−03	2.12	1.99E−04	3.14	3.88E−06	4.15	6.98E−08	5.16	8.93E−10	6.16
0.125	1.53E−03	2.06	2.37E−05	3.07	2.30E−07	4.08	2.07E−09	5.08	1.32E−11	6.08
0.0625	3.74E−04	2.03	2.89E−06	3.03	1.40E−08	4.04	6.29E−11	5.04	2.02E−13	6.03

Table 50: Results of the reconstruction without restriction; $\phi(x) = \exp(x)$.

x_f	d=1		d=2		d=3		d=4		d=5	
	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$
1	6.66E−01	—	1.53E−01	—	2.02E−02	—	1.95E−03	—	1.37E−04	—
0.5	2.87E−01	1.21	3.18E−02	2.26	2.05E−03	3.30	9.86E−05	4.31	3.44E−06	5.32
0.25	1.34E−01	1.10	7.27E−03	2.13	2.32E−04	3.15	5.55E−06	4.15	9.62E−08	5.16
0.125	6.47E−02	1.05	1.74E−03	2.06	2.76E−05	3.07	3.29E−07	4.08	2.85E−09	5.08
0.0625	3.18E−02	1.02	4.25E−04	2.03	3.37E−06	3.04	2.00E−08	4.04	8.69E−11	5.04

Table 51: Results of the reconstruction without restriction; $\phi(x) = x^5$.

x_f	d=1		d=2		d=3		d=4		d=5	
	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$
1	1.17E−01	—	1.12E−01	—	4.43E−02	—	7.71E−03	—	2.21E−16	—
0.5	3.66E−03	5.00	3.50E−03	5.00	1.38E−03	5.00	2.41E−04	5.00	1.90E−20	—
0.25	1.14E−04	5.00	1.09E−04	5.00	4.33E−05	5.00	7.53E−06	5.00	3.56E−20	—
0.125	3.58E−06	5.00	3.41E−06	5.00	1.35E−06	5.00	2.35E−07	5.00	1.11E−21	—
0.0625	1.12E−07	5.00	1.07E−07	5.00	4.23E−08	5.00	7.35E−09	5.00	3.48E−23	—

Table 52: Results of the reconstruction without restriction; $\phi(x) = x^5$.

x_f	d=1		d=2		d=3		d=4		d=5	
	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$
1	4.73E−01	—	9.25E−01	—	6.38E−01	—	1.54E−01	—	4.16E−15	—
0.5	2.95E−02	4.00	5.78E−02	4.00	3.99E−02	4.00	9.60E−03	4.00	3.07E−18	—
0.25	1.85E−03	4.00	3.61E−03	4.00	2.49E−03	4.00	6.00E−04	4.00	1.77E−18	—
0.125	1.15E−04	4.00	2.26E−04	4.00	1.56E−04	4.00	3.75E−05	4.00	1.11E−19	—
0.0625	7.21E−06	4.00	1.41E−05	4.00	9.74E−06	4.00	2.34E−06	4.00	6.92E−21	—

Table 53: Results of the reconstruction without restriction; $\phi(x) = (1+x)^5$.

x_f	d=1		d=2		d=3		d=4		d=5	
	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$
1	4.63E+00	—	1.33E+00	—	1.52E−01	—	7.71E−03	—	2.66E−15	—
0.5	7.54E−01	2.62	1.23E−01	3.43	8.11E−03	4.23	2.41E−04	5.00	3.33E−16	—
0.25	1.50E−01	2.33	1.30E−02	3.24	4.63E−04	4.13	7.53E−06	5.00	6.66E−16	—
0.125	3.31E−02	2.17	1.49E−03	3.13	2.76E−05	4.07	2.35E−07	5.00	7.77E−16	—
0.0625	7.79E−03	2.09	1.78E−04	3.07	1.68E−06	4.04	7.35E−09	5.00	1.78E−15	—

Table 54: Results of the reconstruction without restriction; $\phi(x) = (1+x)^5$.

x_f	d=1		d=2		d=3		d=4		d=5	
	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$
1	2.17E+01	—	1.18E+01	—	2.25E+00	—	1.54E−01	—	9.06E−14	—
0.5	7.45E+00	1.54	2.21E+00	2.41	2.42E−01	3.22	9.60E−03	4.00	4.17E−14	1.12
0.25	3.06E+00	1.28	4.72E−01	2.23	2.77E−02	3.12	6.00E−04	4.00	5.95E−14	↑
0.125	1.38E+00	1.14	1.09E−01	2.12	3.31E−03	3.07	3.75E−05	4.00	7.19E−14	↑
0.0625	6.58E−01	1.07	2.61E−02	2.06	4.04E−04	3.03	2.34E−06	4.00	3.75E−13	↑

Table 55: Results of the reconstruction without restriction; $\phi(x) = x^2$.

x_f	d=1		d=2		d=3		d=4		d=5	
	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$	$E_{0,\infty}$	$O_{0,\infty}$
1	1.88E−01	—	0	—	4.91E−16	—	2.49E−16	—	4.40E−16	—
0.5	4.69E−02	2.00	0	—	3.97E−17	—	2.20E−17	—	4.16E−17	—
0.25	1.17E−02	2.00	0	—	9.94E−18	—	5.50E−18	—	1.04E−17	—
0.125	2.93E−03	2.00	0	—	2.48E−18	—	1.38E−18	—	2.60E−18	—
0.0625	7.32E−04	2.00	0	—	6.21E−19	—	3.44E−19	—	6.50E−19	—

Table 56: Results of the reconstruction without restriction; $\phi(x) = x^2$.

x_f	d=1		d=2		d=3		d=4		d=5	
	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$	$E_{1,\infty}$	$O_{1,\infty}$
1	1.00E+00	—	0	—	5.55E−15	—	4.25E−15	—	9.77E−15	—
0.5	5.00E−01	1.00	0	—	1.15E−15	—	1.54E−16	—	2.42E−16	—
0.25	2.50E−01	1.00	0	—	5.75E−16	—	7.71E−17	—	1.21E−16	—
0.125	1.25E−01	1.00	0	—	2.87E−16	—	3.85E−17	—	6.04E−17	—
0.0625	6.25E−02	1.00	0	—	1.44E−16	—	1.93E−17	—	3.02E−17	—