

spruce budworm

Euler Verfahren

h	error	error/h	error/h ²	error/h ³	error/h ⁴
1/2 ¹	2.421e+000	4.841e+000	9.683e+000	1.937e+001	3.873e+001
1/2 ²	1.283e+000	5.133e+000	2.053e+001	8.213e+001	3.285e+002
1/2 ³	6.410e-001	5.128e+000	4.102e+001	3.282e+002	2.625e+003
1/2 ⁴	3.204e-001	5.126e+000	8.202e+001	1.312e+003	2.100e+004
1/2 ⁵	1.599e-001	5.117e+000	1.637e+002	5.239e+003	1.677e+005
1/2 ⁶	7.989e-002	5.113e+000	3.272e+002	2.094e+004	1.340e+006
1/2 ⁷	3.993e-002	5.111e+000	6.542e+002	8.374e+004	1.072e+007
1/2 ⁸	1.996e-002	5.110e+000	1.308e+003	3.349e+005	8.572e+007
1/2 ⁹	9.978e-003	5.109e+000	2.616e+003	1.339e+006	6.857e+008
1/2 ¹⁰	4.989e-003	5.109e+000	5.231e+003	5.357e+006	5.485e+009
1/2 ¹¹	2.494e-003	5.108e+000	1.046e+004	2.143e+007	4.388e+010
1/2 ¹²	1.247e-003	5.108e+000	2.092e+004	8.570e+007	3.510e+011
1/2 ¹³	6.236e-004	5.108e+000	4.185e+004	3.428e+008	2.808e+012

Ordnung k = 1.000

Heun Verfahren

h	error	error/h	error/h ²	error/h ³	error/h ⁴
1/2 ¹	7.005e-001	1.401e+000	2.802e+000	5.604e+000	1.121e+001
1/2 ²	1.833e-001	7.331e-001	2.932e+000	1.173e+001	4.692e+001
1/2 ³	4.997e-002	3.997e-001	3.198e+000	2.558e+001	2.047e+002
1/2 ⁴	1.312e-002	2.099e-001	3.358e+000	5.373e+001	8.598e+002
1/2 ⁵	3.367e-003	1.077e-001	3.448e+000	1.103e+002	3.530e+003
1/2 ⁶	8.530e-004	5.459e-002	3.494e+000	2.236e+002	1.431e+004
1/2 ⁷	2.147e-004	2.748e-002	3.518e+000	4.502e+002	5.763e+004
1/2 ⁸	5.385e-005	1.379e-002	3.529e+000	9.035e+002	2.313e+005
1/2 ⁹	1.349e-005	6.905e-003	3.535e+000	1.810e+003	9.268e+005
1/2 ¹⁰	3.375e-006	3.456e-003	3.538e+000	3.623e+003	3.710e+006
1/2 ¹¹	8.440e-007	1.728e-003	3.540e+000	7.250e+003	1.485e+007
1/2 ¹²	2.110e-007	8.644e-004	3.541e+000	1.450e+004	5.940e+007
1/2 ¹³	5.277e-008	4.323e-004	3.541e+000	2.901e+004	2.376e+008

Ordnung k = 2.000

verb. Heun Verfahren

h	error	error/h	error/h ²	error/h ³	error/h ⁴
1/2 ¹	3.997e-002	7.994e-002	1.599e-001	3.198e-001	6.396e-001
1/2 ²	3.967e-003	1.587e-002	6.348e-002	2.539e-001	1.016e+000
1/2 ³	5.319e-004	4.255e-003	3.404e-002	2.723e-001	2.179e+000
1/2 ⁴	6.913e-005	1.106e-003	1.770e-002	2.832e-001	4.531e+000
1/2 ⁵	8.814e-006	2.820e-004	9.026e-003	2.888e-001	9.242e+000
1/2 ⁶	1.112e-006	7.120e-005	4.557e-003	2.916e-001	1.866e+001
1/2 ⁷	1.397e-007	1.789e-005	2.289e-003	2.930e-001	3.751e+001
1/2 ⁸	1.751e-008	4.482e-006	1.147e-003	2.937e-001	7.520e+001
1/2 ⁹	2.191e-009	1.122e-006	5.744e-004	2.941e-001	1.506e+002
1/2 ¹⁰	2.740e-010	2.806e-007	2.874e-004	2.943e-001	3.013e+002
1/2 ¹¹	3.429e-011	7.023e-008	1.438e-004	2.946e-001	6.033e+002
1/2 ¹²	4.283e-012	1.754e-008	7.185e-005	2.943e-001	1.206e+003
1/2 ¹³	5.524e-013	4.526e-009	3.707e-005	3.037e-001	2.488e+003

Ordnung k = 2.9548