

# Stability analysis of $\theta$ -methods for neutral functional differential equations

Numerische Mathematik

70, 473-485

DOI: [10.1007/s002110050129](https://doi.org/10.1007/s002110050129)

Citation Report

#	ARTICLE	IF	CITATIONS
1	On the $\hat{I}_1$ -method for delay differential equations with infinite lag. Journal of Computational and Applied Mathematics, 1996, 71, 177-190.	2.0	48
2	Asymptotic behaviour of functional-differential equations with proportional time delays. European Journal of Applied Mathematics, 1996, 7, 11-30.	2.9	58
3	Asymptotic stability properties of $\hat{I}_1$ -methods for the pantograph equation. Applied Numerical Mathematics, 1997, 24, 279-293.	2.1	62
4	On the discretization of differential and Volterra integral equations with variable delay. BIT Numerical Mathematics, 1997, 37, 1-12.	2.0	32
5	Exact and discretized stability of the pantograph equation. Applied Numerical Mathematics, 1997, 24, 295-308.	2.1	47
6	Numerical investigation of the pantograph equation. Applied Numerical Mathematics, 1997, 24, 309-317.	2.1	48
7	On Neutral Functionalâ€Differential Equations with Proportional Delays. Journal of Mathematical Analysis and Applications, 1997, 207, 73-95.	1.0	66
8	On neutral functional-differential equations with variable time delays. Mathematical Proceedings of the Cambridge Philosophical Society, 1998, 124, 371-384.	0.4	25
9	Title is missing!. Advances in Computational Mathematics, 1999, 11, 315-329.	1.6	14
10	The NGP-stability of Runge-Kutta methods for systems of neutral delay differential equations. Numerische Mathematik, 1999, 81, 451-459.	1.9	34
11	Stability of Runge-Kutta methods for the generalized pantograph equation. Numerische Mathematik, 1999, 84, 233-247.	1.9	39
12	Numerical Solution of Implicit Neutral Functional Differential Equations. SIAM Journal on Numerical Analysis, 1999, 36, 516-528.	2.3	40
13	On the Attainable Order of Collocation Methods for the Neutral Functional-Differential Equations with Proportional Delays. Computing (Vienna/New York), 2000, 64, 207-222.	4.8	21
14	Stability of the Radau IA and Lobatto IIIC methods for neutral delay differential system. Journal of Computational and Applied Mathematics, 2001, 137, 279-292.	2.0	2
15	Geometric meshes in collocation methods for Volterra integral equations with proportional delays. IMA Journal of Numerical Analysis, 2001, 21, 783-798.	2.9	55
16	The discrete dynamics of nonlinear infinite-delay-differential equations. Applied Mathematics Letters, 2002, 15, 521-526.	2.7	26
17	Stability of $\hat{I}_1$ -methods for delay integro-differential equations. Journal of Computational and Applied Mathematics, 2003, 161, 393-404.	2.0	34
18	Stability of one-leg $\hat{A}$ -methods for the variable coefficient pantograph equation on the quasi-geometric mesh. IMA Journal of Numerical Analysis, 2003, 23, 421-438.	2.9	35

#	ARTICLE	IF	CITATIONS
19	Linear stability of numerical methods for systems of functional differential equations with a proportional delay*. Progress in Natural Science: Materials International, 2003, 13, 329-333.	4.4	3
20	The numerical analysis of functional integral and integro-differential equations of Volterra type. , 2004, , 55-146.		13
21	-stability of Rungeâ€Kutta methods with general variable stepsize for pantograph equation. Applied Mathematics and Computation, 2004, 148, 881-892.	2.2	10
22	Nonlinear stability of Runge-Kutta methods applied to infinite-delay-differential equations. Mathematical and Computer Modelling, 2004, 39, 495-503.	2.0	19
23	-stability of linear $\hat{I}_1$ -method with general variable stepsize for system of pantograph equations with two delay terms. Applied Mathematics and Computation, 2004, 156, 817-829.	2.2	1
24	Asymptotical Stability of Numerical Methods with Constant Stepsize for Pantograph Equations. BIT Numerical Mathematics, 2005, 45, 743-759.	2.0	31
25	Discretized Stability and Error Growth of The Nonautonomous Pantograph Equation. SIAM Journal on Numerical Analysis, 2005, 42, 2020-2042.	2.3	30
26	The stability of modified Runge-Kutta methods for the pantograph equation. Mathematics of Computation, 2006, 75, 1201-1216.	2.1	19
27	Stability of a class of Rungeâ€Kutta methods for a family of pantograph equations of neutral type. Applied Mathematics and Computation, 2006, 181, 1170-1181.	2.2	17
28	Stability Analysis of $\hat{I}_1$ -Methods for Neutral Multidelay Integro-differential System. Discrete Dynamics in Nature and Society, 2007, 2007, 1-8.	0.9	0
29	Optimal Superconvergence Results for Delay Integroâ€Differential Equations of Pantograph Type. SIAM Journal on Numerical Analysis, 2007, 45, 986-1004.	2.3	28
30	On the one-leg $\hat{I}_1$ -methods for solving nonlinear neutral functional differential equations. Applied Mathematics and Computation, 2007, 193, 285-301.	2.2	66
31	Analytic solutions to a class of nonlinear infinite-delay-differential equations. Journal of Mathematical Analysis and Applications, 2008, 343, 724-732.	1.0	21
32	Stability analysis of general linear methods for the nonautonomous pantograph equation. IMA Journal of Numerical Analysis, 2008, 29, 444-465.	2.9	10
33	Stability Analysis of $\Theta$ -Methods for Nonlinear Neutral Functional Differential Equations. SIAM Journal of Scientific Computing, 2008, 30, 2181-2205.	2.8	27
34	Current work and open problems in the numerical analysis of Volterra functional equations with vanishing delays. Frontiers of Mathematics in China, 2009, 4, 3-22.	0.7	27
35	Stability of one-leg $\hat{I}_1$ -methods for nonlinear neutral differential equations with proportional delay. Applied Mathematics and Computation, 2009, 213, 177-183.	2.2	34
36	Recent advances in the numerical analysis of Volterra functional differential equations with variable delays. Journal of Computational and Applied Mathematics, 2009, 228, 524-537.	2.0	26

#	ARTICLE	IF	CITATIONS
37	Numerical stability of higher-order derivative methods for the pantograph equation. Applied Mathematics and Computation, 2012, 218, 5739-5745.	2.2	3
38	A New Method Based on the RKHSM for Solving Systems of Nonlinear IDDEs with Proportional Delays. Abstract and Applied Analysis, 2013, 2013, 1-13.	0.7	1
39	Stability analysis of block boundary value methods for neutral pantograph equation. Journal of Difference Equations and Applications, 2013, 19, 1227-1242.	1.1	7
40	High order stable Runge-Kutta methods for nonlinear generalized pantograph equations on the geometric mesh. Applied Mathematical Modelling, 2015, 39, 270-283.	4.2	16
41	High-order collocation methods for nonlinear delay integral equation. Journal of Computational and Applied Mathematics, 2017, 326, 284-295.	2.0	13
42	Fully-geometric mesh one-leg methods for the generalized pantograph equation: Approximating Lyapunov functional and asymptotic contractivity. Applied Numerical Mathematics, 2017, 117, 50-68.	2.1	13
43	A class of stochastic one-parameter methods for nonlinear SFDEs with piecewise continuous arguments. Applied Numerical Mathematics, 2019, 135, 1-14.	2.1	4
44	Unconditionally stable compact theta schemes for solving the linear and semi-linear fourth-order diffusion equations. Applied Mathematics and Computation, 2019, 342, 118-129.	2.2	4
45	Asymptotical mean-square stability of linear $\hat{I}_t$ -methods for stochastic pantograph differential equations: variable stepsize and transformation approach. International Journal of Computer Mathematics, 0, , 1-12.	1.8	3
46	Numerical approximation to nonlinear delay-differential algebraic equations with proportional delay using block boundary value methods. Journal of Computational and Applied Mathematics, 2022, 404, 113867.	2.0	1
47	One-parameter orthogonal spline collocation methods for nonlinear two-dimensional Sobolev equations with time-variable delay. Communications in Nonlinear Science and Numerical Simulation, 2022, 108, 106233.	3.3	5
48	Stability analysis of the high-order multistep collocation method for the functional integral equations with constant delays. Boletim Da Sociedade Paranaense De Matematica, 0, 40, 1-11.	0.4	0
49	Long time behavior of higher-order delay differential equation with vanishing proportional delay and its convergence analysis using spectral method. AIMS Mathematics, 2022, 7, 4946-4959.	1.6	1
50	One-parameter Galerkin Finite Element Methods for Neutral Reaction-diffusion Equations with Piecewise Continuous Arguments. Journal of Scientific Computing, 2022, 90, 1.	2.3	2
51	An Analysis of the Theta-Method for Pantograph-Type Delay Differential Equations. Complexity, 2022, 2022, 1-8.	1.6	2
52	An efficient IMEX method for nonlinear functional differential equations with state-dependent delay. Applied Numerical Mathematics, 2022, , .	2.1	0
53	Asymptotical Stability of Neutral Reaction-Diffusion Equations with PCAS and Their Finite Element Methods. Acta Mathematica Scientia, 2023, 43, 1865-1880.	1.0	1