



Jemal Peradze

Associate professor of Tbilisi State University, Invited
professor of Georgian Technical University

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Date of Birth November 14, 1941

Marital Status married, one son, two grandchildren

Education and Scientific Degree

University diploma in mathematics (computational mathematics), Tbilisi State University

Ph.D in mathematics, A.Razmadze Mathematical Institute of Georgian Academy of Sciences

Doctor of sciences in mathematics, Institute of Mathematics of the National Academy of Sciences of Ukraine

Academic title of professor in mathematics, Tbilisi State University

Research Interests

Numerical analysis

Boundary and initial boundary value problems for nonlinear partial differential equations

Computational mechanics

Teaching Courses

Numerical analysis

Numerical methods for partial differential equations

Projection methods

Finite element method for differential equations

Calculus IV

Higher mathematics

Selected Publications

2002-2017

1. J. Peradze, A Kirchhoff type equation in a nonlinear model of shell vibration, *J. Appl. Math. Mech.*, 97:2, 144-158, 2017.
2. J. Peradze, On the approximate solution of a Kirchhoff type static beam equation, *Trans. A.Razmadze Math. Inst.*, 170, 266-271, 2016.
3. J. Peradze, An approximate method for the plate under symmetric load, *Proc. I.Vekua Inst. Math.*, v.64, 48-55, 2014.
4. J. Peradze, On the accuracy of the Galerkin method for a nonlinear dynamic beam equation, *Math. Meth. Appl. Sci.*, v. 34, issue 14, 1725-1732, 2011.
5. J. Peradze, On the convergence of an iteration method in Timoshenko's theory of plates, *Adv. Struct. Mater.*, v. 15, 83-90, 2011.
6. J. Peradze, On an iteration method of finding a solution of a nonlinear equilibrium problem for Timoshenko's plate, *Z. Angew. Math. Mech.*, 91, no. 12, 993-1001, 2011.
7. J. Peradze, A numerical algorithm of solving a Kirchhoff integro-differential equation and its error, *Proc. 2nd WSEAS Intern. Conf. "Finite Differences –Finite Elements-Finite Volumes-Boundary Elements" (F-and-B '09)*, Tbilisi, 124-129, 2009.
8. J. Peradze, A numerical algorithm for a Kirchhoff-type nonlinear static beam, *J. Appl. Math.*, Hindawi Publication, v.2009, Article ID 818269, 12 p., 20012.
9. J. Peradze, An approximate algorithm for one nonlinear beam equation, *Bull. Georgian Nats. Acad. Sci.*, 3, no. 1, 42-4 9, 2009.
10. J. Peradze, An approximate algorithm for a Kirchhoff wave equation, *SIAM J. Numer. Anal.*, 47, no. 3, 2243-2268, 2009.
11. J. Peradze, An error of the Galerkin method for a nonhomogeneous Kirchhoff type wave equation, *Intern. J. Appl. Math. Inform.*, issue 4, v. 2, 105-113, 2008.
12. J. Peradze, On the errors of one method of solution of a static equation for a string, *Proc. A.Razmadze Math. Inst.*, 148, 45-49, 2008.
13. J. Peradze, A numerical algorithm for the nonlinear Kirchhoff string equation, *Numer.Math.*, no. 2, 311-342, 2005.
14. J. Peradze, The existence of solution and a numerical method for the Timoshenko nonlinear system, *M2AN-Math. Model. Numer. Anal.*, 38, no. 1, 1-26, 2004.
15. J. Peradze, Discussions of "A Galerkin method for a nonlinear integro-differential wave system" by I.Christie and J.M. Sanz-Serna, *Comput. Meth. Appl. Mech. Engrg.*, 44, 229-237, *Comput. Meth. Appl. Mech. Engrg.*, 191, 5249-5250, 2002.