

{tag} International Journal of Computer Applications
Foundation of Computer Science (FCS), NY, USA

[Volume 175](#)

-
[Number 7](#)

Year of Publication: 2017

Authors:

Songita Boruah, Arun Kumar Baruah

10.5120/ijca2017915603

{bibtex}2017915603.bib{/bibtex}

Abstract

This paper discusses the Bisection method for Three-parameter eigenvalue problems keeping one parameter constant. Finally some numerical results are presented to illustrate the performance and application of this method.

References

1. Atkinson, F.V., 1972. 'Multiparameter Eigenvalue Problems', (Matrices and compact operators) Academic Press, New York, Vol.1
2. Atkinson, F.V., 1968. 'Multiparameter spectral theory', Bull.Am.Math.Soc., Vol.75, pp(1-28)
3. Baruah, A.K., 1987. 'Estimation of eigen elements in a two-parameter eigen value problem', Ph.D Thesis, Dibrugarh University, Assam.
4. Binding, P and Browne P. J., (1989). 'Two parameter eigenvalue problems for matrices', Linear algebra and its application, pp(139-157)

5. Browne, P.J., 1972. 'A multiparameter eigenvalue problem'. J. Math. Anal. And Appl. Vol. 38, pp(553-568)
6. Changmai, J., 2009. 'Study of two-parameter eigenvalue problem in the light of finite element procedure'. Ph. D Thesis, Dibrugarh University, Assam.
7. Collatz, L.(1968). 'Multiparameter eigenvalue problems in linear product spaces', J. Compu. and Syst.Scie., Vol. 2, pp(333-341)
8. Fox, L., Hayes, L. And Mayers, D.F., 1981. 'The double eigenvalue problems, Topic in Numerical Analysis ', Proc. Roy. Irish Acad. Con., Univ. College, Dublin, 1972, Academic Press, pp(93-112)
9. Horn, R.A,1994. ' Topics in Matrix Analysis'. Cambridge, Cambridge University.
10. Hua Daia, 2007. "Numerical methods for solving multiparameter eigenvalue problems," International Journal of Computer Mathematics, 72:3, 331-347
11. Konwar, J., 2002. 'Certain studies of two-parameter eigenvalue problems', Ph.D Thesis, Dibrugarh University, Assam.
12. Browne Philip A. 'Numerical Methods for Two-parameter eigenvalue problem'.
13. Plestenjak, B., 2003. Lecture Slides, ' Numerical methods for algebraic two parameter eigenvalue problems', Ljubljana, University of Ljubljans.
14. Roach, G.F., (1976). 'A Fredholm theory for multiparameter problems', Nieuw Arch. V. Wiskunde, Vol.XXIV(3), pp(49-76)
15. Sleemen, B. D., 1971. 'Multiparameter eigenvalue problem in ordinary differential equation'. Bul. Inst. Poll. Jassi. Vol. 17, No. 21 pp(51-60)
16. Sleeman, B.D., 1978, "Multiparameter Spectral Theory in Hilbert Space," Pitman Press, London

Index Terms

Computer Science

Applied Sciences

Keywords

Multiparameter, eigenvalue, eigenvector, Bisection Method