Dr. A. Tamilselvan
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Research Interests
Numerical methods for singularly perturbed differential equations

Publications

Published

1. A. Tamilselvan, N. Ramanujam and V. Shanthi, A numerical method for
    singularly perturbed weakly coupled system of two second order ordinary
    differential equations with discontinuous source term, Journal of
    Computational and Applied Mathematics, Volume 202, Issue 2, 2007, pp 203-
    216.

2. R. Mythili Priyadharshini, N. Ramanujam and A. Tamilselvan, Hybrid
    difference schemes for a system of singularly perturbed convection-diffusion
    equations, Journal of Applied Mathematics & Informatics, Vol.27(2009), No.5-
    6, pp.1001-1015.

3. A. Tamilselvan and N. Ramanujam, A numerical method for singularly
    perturbed system of second order ordinary differential equations of
    convection-diffusion type with a discontinuous source term, Journal of
    Applied Mathematics & Informatics, Vol.27(2009), No.5-6, pp.1279-1292.

4. A. Tamilselvan, N. Ramanujam, R. Mythili Priyadharshini and
    T.Valanarasu, Parameter uniform numerical method for a system of coupled
    singularly perturbed convection-diffusion equations with mixed type boundary
    conditions, Journal of Applied mathematics & Informatics, Vol.28(2010),
    No.1-2, pp.109-130.

5. A. Tamilselvan and N. Ramanujam, A parameter uniform numerical method
    for a system of singularly perturbed convection-diffusion equations with
    discontinuous convection coefficients, International Journal of Computer
    Mathematics, Vol.87(2010), No.6, pp.1374-1388.


**Communicated**


3. J. Christy Roja, **A. Tamilselvan** and N. Geetha, A parameter uniform second order Schwarz method for a weakly coupled system of singularly perturbed convection diffusion equations.


7. B. Sumithra and A. Tamilselvan, Implicit midpoint method with piecewise uniform mesh for stiff systems.

8. B. Sumithra and A. Tamilselvan, Power series Method for solving first order stiff systems on Piecewise uniform mesh.


10. B. Sumithra and A. Tamilselvan, Trapezoidal Method for solving first order stiff systems on Piecewise uniform mesh.

11. N. Geetha, A. Tamilselvan, Parameter uniform numerical method for solving second order singularly perturbed turning point problems with Robin boundary conditions.


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