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THE APPLICATION OF INTEGRAL EQUATIONS TO THE NUMERICAL SOLUTION OF NONLINEAR SINGULAR PERTURBATION PROBLEMS

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摘要
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THE APPLICATION OF INTEGRAL EQUATIONS TO THE NUMERICAL SOLUTION OF NONLINEAR SINGULAR PERTURBATION PROBLEMS

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Abstract The nonlinear singular perturbation problem is solved numerically on nonequidistant meshes which are dense in the boundary layers. The method presented is based on the numerical solution of integral equations [1]. The fourth order uniform accuracy of the scheme is proved. A numerical experiment demonstrates the effectiveness of the method.

Key words

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