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The solution of multipoint boundary value problems by the optimal homotopy asymptotic method. (English) Zbl 1189.65154

Comput. Math. Appl. 59, No. 6, 2000-2006 (2010).

Summary: We solve multipoint boundary value problems using the Optimal Homotopy Asymptotic Method (OHAM).The proposed method is tested upon several problems from the literature and the results are compared with the available exact solution. This method provides easy tools to control the convergence region of approximating solution series where ever necessary.

MSC:

65L99 Numerical methods for ordinary differential equations
34A45 Theoretical approximation of solutions to ordinary differential equations
34B10 Nonlocal and multipoint boundary value problems for ordinary differential equations

Cited in **24** Documents

Keywords:

multipoint boundary value problems; optimal homotopy asymptotic method

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