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Adiyaman, Meltem Evrenosoglu; Somali, Sennur

Taylor's decomposition on two points for one-dimensional Bratu problem

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Review text:

The authors present a Taylor's decomposition method on two points to approximate the one dimensional nonlinear Bratu problem. They first derived an equivalent first order differential equation system. A Taylor's decomposition method on two points is applied to approximate this first order differential equation system. The computation of the eigenvalues of the problem is given. The application and error analysis of the method for the nonlinear initial value problem corresponding to the Bratu problem are discussed. Numerical tests justifying the efficiency of the numerical method are presented.

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