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On first and second order box schemes. (English) Zbl 0649.65052
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The box method for discretizing elliptic boundary value problems is discussed. Error estimates of first and second order between the Galerkin solution and the box method solution are proved. A proposal for a new second order box-like scheme is made.

Reviewer: [W.Hackbusch](#)

MSC:

- [65N06](#) Finite difference methods for boundary value problems involving PDEs
- [65N12](#) Stability and convergence of numerical methods for boundary value problems involving PDEs
- [65N30](#) Finite element, Rayleigh-Ritz and Galerkin methods for boundary value problems involving PDEs
- [35J25](#) Boundary value problems for second-order elliptic equations

Cited in **1** Review
Cited in **90** Documents

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[box method](#); [error estimates](#); [Galerkin solution](#); [comparison with the finite element method](#)

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References:

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