

Sufficient conditions for the asymptotic optimality of projection methods as applied to operator equations

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Abstract

Sufficient conditions are found for the asymptotic optimality of projection methods as applied to linear operator equations in Hilbert spaces. The conditions are applicable to a wide class of equations when asymptotically optimal projection methods are sought for their solution. Applications illustrating the result are presented. © Pleiades Publishing, Ltd., 2009.

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Keywords

Approximate methods for solving operator equations, Asymptotically optimal projection method, Extreme subspace, Projection width