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On stability of inverse problems of spectral analysis for equations of mathematical physics.

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This paper is based on the brilliant work [J. Math. Kyoto Univ. 31, No. 3, 743-753 (1991; Zbl 0753.35121)] of *H. Izosaki*. A careful analysis of this article led to the formulation and proof of a stability theorem on recovery from inexact spectral data of a potential for the Dirichlet and Neumann boundary-value problems in bounded spatial domains Ω with boundary S of class C^2.

MSC:

35R30 Inverse problems for PDEs
35P05 General topics in linear spectral theory for PDEs
35Q40 PDEs in connection with quantum mechanics
35J10 Schrödinger operator, Schrödinger equation

Keywords:

recovery of the potential; inexact spectral data; Dirichlet and Neumann boundary-value problems

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