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A Hölder stability estimate for inverse problems for the ultrahyperbolic Schrödinger equation. (English) Zbl 1428.35679

Anal. Math. Phys. 9, No. 4, 2171-2199 (2019).

Summary: In this article, we first establish a global Carleman estimate for an ultrahyperbolic Schrödinger equation. Next, we prove Hölder stability for the inverse problem of determining a coefficient or a source term in the equation by some lateral boundary data.

MSC:

35R30 Inverse problems for PDEs

35B35 Stability in context of PDEs

35Q40 PDEs in connection with quantum mechanics

Keywords:

ultrahyperbolic Schrödinger equation; inverse problem; stability; Carleman estimate

Full Text: [DOI](#)

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