

**Beltiță, Ingrid**

**Inverse scattering in a layered medium.** (English) [Zbl 1134.35385](#)  
*Commun. Partial Differ. Equations* 26, No. 9-10, 1739-1786 (2001).

Summary: We study the inverse scattering problem for Schrödinger equation. We prove that for non-smooth potential the main singularities of the potential are contained in the Born approximation which can be obtained from measurement of the scattering amplitude in a single outgoing direction. We measure singularities in the scale of Sobolev spaces.

**MSC:**

[35P25](#) Scattering theory for PDEs  
[35L05](#) Wave equation  
[35R30](#) Inverse problems for PDEs  
[47A40](#) Scattering theory of linear operators

Cited in **7** Documents

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