	doc_1		doc_2		decision	id
cases	authors	Richard Melrose Gunther Uhlmann	authors	R. Melrose G. Uhlmann		
	title	Generalized backscattering and the Lax-Phillips transform	title	Generalized backscattering and the Lax-Phillips transform		
	publication_date 2008-01-03 00:00:00		publication_date 2007-12-01 00:00:00			
	source	SupportedSources.INTERNET_ARCHIVE	source	SupportedSources.SEMANTIC_SCHOLAR		
	journal		journal	Serdica. Mathematical Journal		
	volume		volume			
	doi		doi		DUPLICATES	1507
	urls	https://archive.org/download/arxiv-0712.4236/0712.4236.pdf	urls	https://www.semanticscholar.org/paper/3c8c7e4e26b883639a976754ffd7b390b39b0f4d		
	id	id4782869518099943906	id	id-7138442798024459059		
	abstract	Using the free-space translation representation (modified Radon transform) of Lax and Phillips in odd dimensions, it is shown that the generalized backscattering transform (so outgoing angle $\ddot{i}\% = S\hat{1}$, in terms of the incoming angle with S orthogonal and -S invertible) may be further restricted to give an entire, globally Fredholm, operator on appropriate Sobolev spaces of potentials with compact support. As a corollary we show that the modified backscattering map is a local isomorphism near elements of a generic set of potentials.	abstract	Using the free-space translation representation (modified Radon transform) of Lax and Phillips in odd dimensions, it is shown that the generalized backscattering transform (so outgoing angle $\ddot{l}\% = S\hat{l}$, in terms of the incoming angle with S orthogonal and Idâ^'S invertible) may be further restricted to give an entire, globally Fredholm, operator on appropriate Sobolev spaces of potentials with compact support. As a corollary we show that the modified backscattering map is a local isomorphism near elements of a generic set of potentials.		
	versions		versions			