

# Nonlinear Fourier Transform in Dimension Two

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## Abstract

A class of compactly supported Schrodinger potentials in dimension two is given for which the inverse scattering method related to the Novikov-Veselov evolution equation is well-defined. There is no smallness assumption on the initial potential. New results are presented concerning mapping properties of the direct and inverse scattering transforms, also known as nonlinear Fourier transforms.

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