

Imaging of discontinuities in the inverse scattering problem by inversion

mate solution of (2.6) we use in place of (2.4) the first term of \dots responding transport equations along the rays connecting

$$\partial X_n^0(y) = \partial X \setminus \partial X_n(y).$$

we find that

$$C_\phi = \{(k, \xi, x, y) \in R_+ \times \partial X_\eta^0(y) \times X \times X : \Phi(x, y, \xi) = 0, \quad \forall \phi \in \mathcal{F}_\eta(x, y) = 0\} \quad (4.21)$$

F of the form in (4.27) consists of increasingly smooth pseudodifferential operators. Comparing the first term in the ex-

Again, consider the Fourier integral operator F where $v(k, \xi, \eta)$ is described in (3.1). In many cases of practical

where the bar denotes the complex conjugate. In particular, this relation shows that the Fourier space is covered twice if

where \bar{l} and \bar{l}_0 are unit vectors pointing in the direction of x_n axis and in the direction of the line connecting points x and

