

# Uniqueness Questions in Reconstruction of Multidimensional Objects from Tomography-type Projection Data (Inverse and Ill-Posed Problems Series)



The first part of this new volume in the Inverse and Ill-Posed Problems Series studies uniqueness questions for recovering the shapes of the convex and more complicated bodies from shapes of their projections onto planes of low dimension. Some stability estimates of the solutions to these inverse problems are given. The second part deals with inverse problems with projection data directly connected to tomography, in particular to apparent contours of smooth surfaces, which have practical interpretations such as thin cracks in continuous media which are studied in industrial defectoscopy, caustic surfaces which are studied in wave optics, etc. New results on reconstruction of smooth surfaces from observations of the wave fronts generated by these surfaces are obtained.

The Inverse and Ill-Posed Problems Series is a series of monographs publishing physics, medicine, geophysics, acoustics, electrodynamics, tomography, and ecology. . 21: Golubyatnikov, V. P.: Uniqueness Questions in Reconstruction of Multidimensional Objects from Tomography-Type Projection Data (2000) Vol. **Inverse and Ill-Posed Problems Series - De Gruyter** Uniqueness Questions in Reconstruction of Multidimensional Objects from Tomography-Type Projection Data (Inverse and Ill-Posed Problems Series, Band 21) **Uniqueness Questions in Reconstruction of Multidimensional** Objects from Tomography-Type Projection Data (Inverse and Ill-Posed Problems) Uniqueness Questions in Reconstruction of Multidimensional Objects from in the Inverse and Ill-Posed Problems Series studies uniqueness questions for **Harmonic Analysis and Uniqueness questions in Convex Geometry**. Uniqueness Questions in Reconstruction of Multidimensional Objects from Tomography-Type Apparent contours and other tomographytype projection data. **Inverse and Ill-Posed Problems(Series) OverDrive: eBooks** Uniqueness Questions in Reconstruction of Multidimensional Objects from Tomography-Type Projection Data The second part deals with inverse problems with projection data directly connected to tomography, in particular to apparent contours of smooth surfaces, which have Inverse and Ill-Posed Problems Series. **SELECTED PUBLICATION LIST OF Vladimir P. GOLUBYATNIKOV** The inverse problem in Electrical Impedance Tomography (EIT), to be extremely ill-posed, and hence any reconstruction from noisy data suffers from low . Abstract: We show global uniqueness in an inverse problem for the fractional . works on Laplace spectra as finger prints for multi dimensional geometric objects and **Uniqueness Questions in Reconstruction of Multidimensional** Uniqueness Questions in Reconstruction of Multidimensional Objects from Tomography-Type Projection Data. Series:Inverse and Ill-Posed Problems Series 21 **Uniqueness Questions in Reconstruction of - De Gruyter** Abstract. Let  $K$  and  $L$  be two convex bodies in  $R^n$  such that their projections onto every . R. J. Gardner, Geometric Tomography. Second V. P. Golubyatnikov, Uniqueness Questions in Reconstruction of Multidimensional Objects from Tomography Type Projection Data. Inverse and Ill-Posed Problems Series. Utrecht : - : Uniqueness Questions in Reconstruction of Multidimensional Objects from Tomography-Type Projection Data (Inverse and Ill-Posed Problems) **On a functional equation related to a pair of hedgehogs with** questions on unique determination of convex and star bodies. The  $k$ th

projection function of a convex body  $K$  is the function on  $G(n,k)$  that assigns .. Golubyatnikov, V.P.: Uniqueness questions in reconstruction of multidimensional objects from tomography type projection data. In: Inverse and Ill-Posed Problems Series. **Harmonic Analysis and Uniqueness Questions in Convex - Springer** Uniqueness Questions in Reconstruction of Multidimensional Objects from Tomography-Type Projection Data. Series:Inverse and Ill-Posed Problems Series 21 **Uniqueness Questions in Reconstruction of Multidimensional Persons: Golubyatnikov Vladimir Petrovich** - Uniqueness questions in reconstruction of multidimensional objects from tomography-type projection data. Inverse and ill-posed problems series. VSP. Utrecht **Uniqueness Questions in Reconstruction of Multidimensional** Uniqueness Questions in Reconstruction of Multidimensional Objects from in the Inverse and Ill-Posed Problems Series studies uniqueness questions for recovering the The second part deals with inverse problems with projection data directly from Tomography-Type Projection Data (Inverse and Ill-Posed Problems) **Harmonic Analysis and Uniqueness Questions in Convex Geometry** Abstract We discuss some open questions on unique determination of convex bod- .. Uniqueness questions in reconstruction of multidimensional objects from tomography type projection data, in Inverse and Ill-posed problems series, Utrecht **CONVEX BODIES ARE HOMOTHETIC, PROVIDED THEIR** Jun 3, 2003 Ill-Posed Problems - IPP - Illa stallda problem In fact, any measurement, except for the most trivial ones, gives rise to an inverse problem that is ill-posed. Today one . V. P. Goluyatnikov (2000): Uniqueness questions in reconstruction of multidimensional objects from tomography-type projection data. **A Lemma of Nakajima and Suss on convex bodies - Department of** Uniqueness questions in reconstruction of multidimensional objects from tomography-type projection data, Inverse and ill-posed problems series, VSP, **Uniqueness Questions in Reconstruction of Multidimensional** Uniqueness Questions in Reconstruction of Multidimensional Objects from Tomography-Type Projection Data. Series:Inverse and Ill-Posed Problems Series 21 **SELECTED PUBLICATION LIST OF Vladimir P. GOLUBYATNIKOV** Uniqueness questions in reconstruction of multidimensional objects from of multidimensional objects from tomography-type projection data, V.P. Computer modelling in tomography and ill-posed problems, M.M. Lavrentev, S.M. Zerkal and . A Series resource A Temporal resource A Topic resource A Work resource **Ill-Posed Problems** 395 480. 2. Uniqueness questions in reconstruction of multidimensional objects from tomography-type projection data. Inverse and ill-posed problems series. **Uniqueness Questions in Reconstruction of Multidimensional** Inverse and Ill-Posed Problems has 35 entries in the series. Sviridyuk Author Vladimir E. Fedorov Author (2003). cover image of Uniqueness Questions in Reconstruction of Multidimensional Objects from Tomography-Type Projection Data **Uniqueness Questions in Reconstruction of Multidimensional** Uniqueness questions in reconstruction of multidimensional objects from tomography-type projection data, Inverse and ill-posed problems series, VSP, **Uniqueness Questions in Reconstruction of Multidimensional** Nov 29, 2016 Hedgehogs are geometrical objects that describe the Minkowski dif- . Our goal is to show that  $??1(0) = S2$  or  $??1(?) = S2$ . [6] Golubyatnikov, V. P., Uniqueness questions in reconstruction of multidimensional objects from tomography-type projection data, Inverse and Ill-Posed Problems Series, Utrecht **Uniqueness Questions in Reconstruction of Multidimensional Objects - Google Books Result** : Uniqueness Questions in Reconstruction of Multidimensional Objects from Tomography-Type Projection Data (Inverse and Ill-Posed Problems) **Seminars - UCL Centre for Inverse Problems** ric questions about projections of convex shapes, we suggest a very simple proof of .. Uniqueness questions in reconstruction of multidimensional objects from tomography type projection data, Inverse and Ill-posed problems series, **Uniqueness Questions in Reconstruction of Multidimensional** Also available in the Inverse and Ill-Posed Problems Series: Monte Carlo Method for Solving of Multidimensional Objects from Tomography-Type Projection. **Uniqueness Questions in Reconstruction of Multidimensional** Series: Inverse and ill-posed problems series. Part 4 Apparent contours and other tomography-type projection data: reconstruction of surfaces from the shapes