Record Nr. UNINA9910822673203321 Autore Amirov A. Kh Titolo Integral geometry and inverse problems for kinetic equations / / A. Kh. Amirov Pubbl/distr/stampa Utrecht;; Boston:,: VSP,, 2001 **ISBN** 3-11-094094-9 Edizione [Reprint 2014] Descrizione fisica 1 online resource (209 pages) Collana Inverse and ill-posed problems series, , 1381-4524 Disciplina 516.3/62 Soggetti Integral geometry Inverse problems (Differential equations) Chemical kinetics - Mathematics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di bibliografia Includes bibliographical references. Nota di contenuto Frontmatter -- Abstract -- Contents -- Introduction -- Chapter 1. Solvability of problems of integral geometry -- Chapter 2. Inverse problems for kinetic equations -- Chapter 3. Evolutionary equations --Chapter 4. Inverse problems for second order differential equations --Appendix . -- Bibliography In this monograph a method for proving the solvability of integral Sommario/riassunto geometry problems and inverse problems for kinetic equations is presented. The application of this method has led to interesting problems of the Dirichlet type for third order differential equations, the solvability of which appears to depend on the geometry of the domain for which the problem is stated. Another considered subject is the problem of integral geometry on paraboloids, in particular the uniqueness of solutions to the Goursat problem for a differential inequality, which implies new theorems on the uniqueness of solutions to this problem for a class of quasilinear hyperbolic equations. A class of multidimensional inverse problems associated with problems of

integral geometry and the inverse problem for the quantum kinetic

equations are also included.