Analysis.

MazÊp1(Biï¸ aï¸, V. G.,
editor
Nikol'skiiÌ†, S. M. (
SergeiÌ† MikhaiÌ†lovich),) (
1905-2012),
editor

Electronic books

Monografía

A linear integral equation is an equation of the form XEX. (1) 2a(x)cp(x) - Ix k(x, y)cp(y)dv(y) = f(x), Here (X, v) is a measure space with a-finite measure v, 2 is a complex parameter, and a, k, f are given (complex-valued) functions, which are referred to as the coefficient, the kernel, and the free term (or the right-hand side) of equation (1), respectively. The problem consists in determining the parameter 2 and the unknown function cp such that equation (1) is satisfied for almost all x E X (or even for all x E X if, for instance, the integral is understood in the sense of Riemann). In the case f = 0, the equation (1) is called homogeneous, otherwise it is called inhomogeneous. If a and k are matrix functions and, accordingly, cp and f are vector-valued functions, then (1) is referred to as a system of integral equations. Integral equations of the form (1) arise in connection with many boundary value and eigenvalue problems of mathematical physics. Three types of linear integral equations are distinguished: If 2 = 0, then (1) is called an equation of the first kind; if 2a(x) i= 0 for all x E X, then (1) is termed an equation of the second kind; and finally, if a vanishes on some subset of X but 2 i= 0, then (1) is said to be of the third kind

https://rebiunoda.pro.baratznet.cloud:38443/OpacDiscovery/public/catalog/detail/b2FpOmNlbGVicmF0aW9uOmVzLmJhcmF0ei5yZW4vMjg4MTcxMDQ

Título: Analysis. IV Linear and boundary integral equations V. G. Maz'ya, S. M. Nikol'skiiÌ (editors)

Edición: 1st ed. 1991

Editorial: Berlin Heidelberg Springer [1991] Â1991

Descripción física: 1 online resource (VII, 236 p.)

Mención de serie: Encyclopaedia of Mathematical Sciences 0938-0396 27

Nota general: Bibliographic Level Mode of Issuance: Monograph

Bibliografía: Includes bibliographical references and indexes

Contenido: I. Linear Integral Equations -- II. Boundary Integral Equations -- Author Index

Lengua: English

ISBN: 3-642-58175-7

Materia: Calculus, Operational