

1. Record Nr.	UNINA9910830676703321
Autore	Simon Jacques
Titolo	Distributions / / Jacques Simon
Pubbl/distr/stampa	Hoboken, NJ : , : John Wiley & Sons, Inc., , [2022] ©2022
ISBN	1-394-16536-6 1-394-16534-X
Descrizione fisica	1 online resource (408 pages)
Collana	Mathematics and statistics series. Analysis for PDEs set ; ; volume 3
Disciplina	515.782
Soggetti	Theory of distributions (Functional analysis)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Sommario/riassunto	This book presents a simple and original theory of distributions, both real and vector, adapted to the study of partial differential equations. It deals with value distributions in a Neumann space, that is, in which any Cauchy suite converges, which encompasses the Banach and Frchet spaces and the same "weak" spaces. Alongside the usual operations - derivation, product, variable change, variable separation, restriction, extension and regularization - Distributions presents a new operation: weighting. This operation produces properties similar to those of convolution for distributions defined in any open space. Emphasis is placed on the extraction of convergent sub-sequences, the existence and study of primitives and the representation by gradient or by derivatives of continuous functions. Constructive methods are used to make these tools accessible to students and engineers.