

1. Record Nr.	UNINA9910827693803321
Titolo	Mathematical geophysics : an introduction to rotating fluids and the Navier-Stokes equations // J.-Y. Chemin ... [et al.]
Pubbl/distr/stampa	Oxford, : Clarendon Press New York, : Oxford University Press, 2006
ISBN	0-19-191674-9 1-280-90407-0 1-61583-062-6 0-19-151389-X
Edizione	[1st ed.]
Descrizione fisica	1 online resource (263 p.)
Collana	Oxford lecture series in mathematics and its applications ; ; 32
Altri autori (Persone)	CheminJean-Yves
Disciplina	532/.0595 532.0595
Soggetti	Rotating masses of fluid Navier-Stokes equations Geophysics - Mathematics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Previously issued in print: Oxford: Clarendon Press, 2006.
Nota di bibliografia	Includes bibliographical references (p. [239]-246) and index.
Nota di contenuto	Contents; Preface; Acknowledgements; PART I: GENERAL INTRODUCTION; PART II: ON THE NAVIER-STOKES EQUATIONS; 1 Some elements of functional analysis; 2 Weak solutions of the Navier-Stokes equations; 3 Stability of Navier-Stokes equations; 4 References and remarks on the Navier-Stokes equations; PART III: ROTATING FLUIDS; 5 Dispersive cases; 6 The periodic case; 7 Ekman boundary layers for rotating fluids; 8 References and remarks on rotating fluids; PART IV: PERSPECTIVES; 9 Stability of horizontal boundary layers; 10 Other systems; 11 Vertical layers; 12 Other layers; References List of NotationsIndex; A; B; C; D; E; F; G; H; I; L; M; O; P; Q; R; S; T; W; Y
Sommario/riassunto	Aimed at graduate students and researchers in mathematics, engineering, oceanography, meteorology and mechanics, this text provides a detailed introduction to the physical theory of rotating fluids, a significant part of geophysical fluid dynamics.

