

1. Record Nr.	UNINA9910299826303321
Autore	Pfeiffer Friedrich
Titolo	Introduction to Dynamics / / by Friedrich Pfeiffer, Thorsten Schindler
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2015
ISBN	3-662-46721-6
Edizione	[1st ed. 2015.]
Descrizione fisica	1 online resource (X, 215 p. 114 illus.)
Disciplina	531
Soggetti	Vibration Dynamics Mechanics Vibration, Dynamical Systems, Control Classical Mechanics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	Basics -- Linear Discrete Models -- Linear Continuous Models -- Methods for Nonlinear Mechanics -- Vibration Phenomena.
Sommario/riassunto	This concise textbook for students preferably of a postgraduate level, but also for engineers in practice, contains the basic kinematical and kinetic structures of dynamics together with carefully selected applications. The book is a condensed introduction to the fundamental laws of kinematics and kinetics, on the most important principles of mechanics and presents the equations of motion in the form of Lagrange and Newton-Euler. Selected problems of linear and nonlinear dynamics are treated, as well as problems of vibration formation. The presented selection of topics gives a useful basis for stepping into more advanced problems of dynamics. The contents of this book represent the result of a regularly revised course, which has been and still is given for masters students at the Technische Universität München. .