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Nota di contenuto	Non-Diffracting Waves; Title Page; Copyright; Contents; Preface; List of Contributors; Chapter 1 Non-Diffracting Waves: An Introduction; 1.1 A General Introduction; 1.1.1 A Prologue; 1.1.2 Preliminary, and Historical, Remarks; 1.1.3 Definition of Non-Diffracting Wave (NDW); 1.1.4 First Examples; 1.1.5 Further Examples: The Non-Diffracting Solutions; 1.2 Eliminating Any Backward Components: Totally Forward NDW Pulses; 1.2.1 Totally Forward Ideal Superluminal NDW Pulses; 1.3 Totally Forward, Finite-Energy NDW Pulses; 1.3.1 A General Functional Expression for Whatever Totally-Forward NDW Pulses 1.4 Method for the Analytic Description of Truncated Beams 1.4.1 The Method; 1.4.2 Application of the Method to a TB Beam; 1.5 Subluminal NDWs (or Bullets); 1.5.1 A First Method for Constructing Physically Acceptable, Subluminal Non-Diffracting Pulses; 1.5.2 Examples; 1.5.3 A Second Method for Constructing Subluminal Non-Diffracting Pulses; 1.6 ``Stationary'' Solutions with Zero-Speed Envelopes: Frozen Waves; 1.6.1 A New Approach to the Frozen Waves; 1.6.2 Frozen Waves in Absorbing Media; 1.6.3 Experimental Production of the Frozen Waves

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Sommario/riassunto

This continuation and extension of the successful book "Localized Waves" by the same editors brings together leading researchers in non-diffractive waves to cover the most important results in their field and as such is the first to present the current state. The well-balanced presentation of theory and experiments guides readers through the background of different types of non-diffractive waves, their generation, propagation, and possible applications. The authors include a historical account of the development of the field, and cover different types of non-diffractive waves, including A
