1. Record Nr. UNINA9910157848103321 Autore Samiullah Mohammad Titolo A first course in vibrations and waves Pubbl/distr/stampa Oxford:,: Oxford University Press,, 2015 **ISBN** 0-19-180411-8 Edizione [First edition.] Descrizione fisica 1 online resource: illustrations (black and white) Disciplina 531/.32 Soggetti Vibration Waves Acoustics & Sound **Physics** Physical Sciences & Mathematics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Bibliographic Level Mode of Issuance: Monograph Note generali Sommario/riassunto This title builds on introductory physics and emphasises understanding of vibratory motion and waves based on first principles. It is divided into three parts: Part I contains a preliminary chapter that reviews relevant ideas of mechanics and complex numbers; Part II discusses vibrations of mechanical systems, covering a simple harmonic oscillator, coupled oscillators, normal coordinates, beaded string, continuous string, standing waves, and Fourier series. Part II ends with a presentation of stationary solutions of driven finite systems. Part III is

concerned with waves.