1. Record Nr. UNINA9910805583003321 Autore Gattulli Vincenzo Titolo Dynamics and Aerodynamics of Cables [[electronic resource]]: ISDAC 2023 / / edited by Vincenzo Gattulli, Marco Lepidi, Luca Martinelli Cham:,: Springer Nature Switzerland:,: Imprint: Springer,, 2024 Pubbl/distr/stampa **ISBN** 3-031-47152-0 Edizione [1st ed. 2024.] Descrizione fisica 1 online resource (363 pages) Collana Lecture Notes in Civil Engineering, , 2366-2565; ; 399 Altri autori (Persone) LepidiMarco MartinelliLuca Disciplina 620.3 Soggetti Multibody systems Vibration Mechanics, Applied **Dynamics** Nonlinear theories Control engineering Robotics Automation Fluid mechanics Machinery Multibody Systems and Mechanical Vibrations Applied Dynamical Systems Control, Robotics, Automation **Engineering Fluid Dynamics** Machinery and Machine Elements Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Intro -- Organization -- Preface -- Contents -- Keynotes -- Explore Nota di contenuto Essential Elements in the Generation Mechanisms of Wind-Induced Cable Vibrations: An Insight Offered by Numerical Techniques -- 1

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Sommario/riassunto

This volume gathers the latest advances, innovations and applications in the field of cable dynamics and aerodynamics, as presented by leading researchers and engineers at the 3rd International Symposium on Dynamics and Aerodynamics of Cables (ISDAC), held in Rome, Italy on June 15-17, 2023. The contributions encompass topics such as nonlinear cable dynamics, cable structures and moving cables, cable aging, fatigue, degradation and failure mechanisms, laboratory testing of cable dynamics and aerodynamics, computational models for cable dynamics and fluid-structure interaction, cable vibration control, cable driven parallel manipulators, monitoring of cable performance, environmental and anthropic loads on cable structures. The contributions, which were selected through a rigorous international peer-review process, share exciting ideas that will spur novel research directions and foster new multidisciplinary collaborations.