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Sommario/riassunto

This book is a compendium of the proceedings of the International Conference on Applied Analysis, Computation, and Mathematical Modelling in Engineering (AACMME-2021). The book covers a variety of applications such as mechanical, acoustical, physical, electrical, bio-mathematical, and computational fluid dynamics. Since mathematical modeling necessitates a wide range of skills and methods, the book concentrates on techniques that will be of specific interest to engineers, scientists, and those who work with discrete and continuous systems models. This book guides students, researchers, and professionals through the new approaches, the powerful tools for quickly mastering the most popular mathematical and computational models used in engineering and science. These new approaches enable readers to not only systematically create effective models, but also extend these models to any macroscopic physical structure.