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Salma Alrasheed

Principles of Mechanics

Fundamental University Physics

OPEN

 Springer

Salma Alrasheed
Thuwal, Saudi Arabia



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Preface

This book is aimed at taking the reader step by step through the beautiful concepts of mechanics in a clear and detailed manner. Mechanics is considered to be the core of physics and a deep understanding of the concepts is essential for all branches of physics. Many proofs and examples are included to help the reader grasp the fundamentals fully, paving the way to deal with more advanced topics. This book is useful for undergraduate students majoring in physics or other science and engineering disciplines. It can also be used as a reference for more advanced levels.

I would like to express my deep gratitude to my parents Abdulkareem Alrasheed and Mona Alzamil for their encouragement and support. I am grateful to all of those who have contributed to this book and made its completion possible. In particular, I would like to thank Khalid Alzamil, Dr. Laila Babsail, and Abbie Clifford for their efforts in revising the book. My sincere thanks are also extended to Ardel Flavier and Rodolfo Rodriguez for their assistance in creating the figures and illustrations. Finally to my daughter Layla, words can't express my appreciation to you.

Jeddah, Saudi Arabia
January 2019

Dr. Salma Alrasheed

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