Preface

"I have attempted to deliver [these lectures] in a spirit that should be recommended to all students embarking on the writing of their PH.D. thesis: Imagine that you are explaining your ideas to your former smart, but ignorant, self, at the beginning of your studies!"

—Richard P. Feynman

This quote of Dick Feynman expresses well both our goal in writing this book and the style in which we have tried to present the material—this is how we would have liked someone to explain things to us when we were first learning about differential equations and mechanics.

Richard Palais and Bob Palais