

N. Beissen
H. Quevedo

LECTURE COURSE ON THEORETICAL MECHANICS

Textbook

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N. Beissen
H. Quevedo

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ON THEORETICAL MECHANICS

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Reviewers:

doctor of Physics and Mathematics sciences, Professor **K.N. Dzhumagulova**
doctor of Physics and Mathematics sciences, Professor **N. Burtabayev**
candidate of Physics and Mathematics sciences, Professor **T. Bizhigitov**

Beissen N.

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This book is intended to review standard topics of modern theoretical mechanics, which have been selected and briefly explained from a theoretical point of view. In addition, the definitions and theoretical explanations have been complemented with particular examples in which most of the intermediate calculations are presented. The examples included in this tutorial are intended to help the students to solve the learning problems that have been detected during the lectures and seminars. Publishing in authorial release.

The textbook is intended for students of the specialties "Physics", "Nuclear Physics".

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PREFACE

This tutorial is intended to serve as an introduction to the field of theoretical mechanics. It is a short book, and is not intended to explain in detail and to review all the topics of modern theoretical mechanics. Instead, several standard topics have been selected and briefly explained from a theoretical point of view. In addition, the definitions and theoretical explanations have been complemented with particular examples in which most of the intermediate calculations are presented. With this method we intend to help novice students to develop their own skills in solving problems independently.

This is the first tutorial of theoretical mechanics written in English language for undergraduate students of Kazakh universities and institutes. It is based on lectures and seminars given by the authors at the al-Farabi Kazakh National University. The examples included in this tutorial are intended to help the students to solve the learning problems that have been detected during the lectures and seminars.

We offer this book to our students with the aim to help them to understand a little bit the wonderful world of theoretical physics.

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Beissen Nurzada
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