

# Contents

## 1 Introduction

..... 1

### 1.1 Motivation

..... 1

### 1.2 The Laboratory and Its New Project

.....

1.3 The Magnets

..... 4

1.4 Scope of this Treatise

..... 7

References

..... 9

**2 Electromagnetic Fields and Particle Motion**

.....

2.1 Maxwell's Equations

..... 11

2.1.1 Magnetic Quasistatic Approximation

..... 12

2.1.2 Magnetic Field in Linear Material

..... 13

2.2 Particle Motion in Magnetic Fields

..... 17



<http://www.springer.com/978-3-319-65665-6>

Advanced Multipoles for Accelerator Magnets

Theoretical Analysis and Their Measurement

Schnizer, P.

2017, XI, 166 p. 50 illus., 34 illus. in color., Hardcover

ISBN: 978-3-319-65665-6