

Kharazishvili, A. B.

Transformation groups and invariant measures. Set-theoretical aspects. (English)

Zbl 1013.28012

Singapore: World Scientific. viii, 260 p. (1998).

This book is an exposition of the classical theory of measures, defined on σ -algebras of spaces X , that are invariant with respect to a transformation group of X . Indeed, the book is based on graduate course lectures on the subject. Scattered throughout the book are a significant number of exercises for the student to test his understanding of the subject matter.

Topics covered in the book include standard facts concerning Lebesgue and Borel measures. The tenth and final chapter present the Mackey-Weil theorem providing a characterization of σ -finite quasiinvariant Borel measures on standard groups. A group is said to be standard if it is a Borel subgroup of some Polish group.

Reviewer: [Benjamin B. Wells jun.\(Charlotte\)](#)

MSC:

- [28C10](#) Set functions and measures on topological groups or semigroups, Haar measures, invariant measures
- [03E15](#) Descriptive set theory
- [28-01](#) Introductory exposition (textbooks, tutorial papers, etc.) pertaining to measure and integration
- [37A15](#) General groups of measure-preserving transformations and dynamical systems

Cited in **12** Documents

Keywords:

[invariant measure](#); [quasiinvariant measure](#); [transformation group](#)