

Real-Valued Random Measures as Random Variable-Valued Measures Outline and Abstract

Abstract

Outline

1. Introduction

2. Random Variable-Valued Measures (R.V.V.M.'s)

- 2.1. R.V.V.M.'s as Topological Vector Space-Valued Measures
- 2.2. R.V.V.M.'s as a Topological Vector Space
- 2.3. Other Important Definitions and Concepts
- 2.4. Pettis-Measurability Properties of R.V.V.M.'s
- 2.5. Integration of R.V.V.M.'s

3. Jordan Decomposition for R.V.V.M.'s and 1-1 Correspondence with Random Measures

- 3.1. Jordan Decomposition for R.V.V.M.'s
- 3.2. A Caratheodory Extension for R.V.V.M.'s
- 3.3. 1-1 Correspondence between R.V.V.M.'s and Random Measures

4. Some Resulting Properties of Random Measures

- 4.1. The Borel Cantelli Lemma for Random Measures
- 4.2. Egorov's Theorem for Random Measures
- 4.3. Convergence Properties of Random Measures
- 4.4. Convergence Theorems for Integration of Random Measures

5. Conclusion