

K. R. PARTHASARATHY. *Probability Measures on Metric Spaces*. Academic Press, 1967. xi + 276 pp. \$12.00.

Review by R. M. DUDLEY

Massachusetts Institute of Technology

This book seems to have been written just at the right time, when most of its subject matter has reached the appropriate degree of maturity.

Nearly half the book is concerned with generalizing the Lévy-Khinchin representation of infinitely divisible probability measures and associated facts to locally compact abelian groups (Chapter 4) and to Hilbert space (Chapter 6). The author himself and other members of the Indian school, along with V. Sazonov, are responsible for most of the results.

Chapter 3 gives preliminaries about measures on metric groups. Chapter 5 studies inverse limits of Borel spaces and regular conditional probabilities, and Chapter 7 studies probabilities on $C[0, 1]$ and $D[0, 1]$.

Chapters 1 and 2 present material on Borel sets and probability measures in separable metric spaces which is useful as a prerequisite not only to Chapters 3–7 but for wide areas of probability and functional analysis; more useful, the reviewer feels, than the study of non-separable locally compact spaces in Halmos' classic *Measure Theory*. The research worker needing further information can consult V. S. Varadarajan's monograph "Measures on topological spaces" (*Amer. Math. Soc. Translations Ser. 2* **48** 161–228).

The book under review contains no exercises, but it is carefully and cogently done and should be quite readable for graduate students.