

**Kalikow, Steven and Randall McCutcheon. *An Outline of Ergodic Theory*. New York, NY: Cambridge University Press, 2010, 174 pp. \$59.00 (Hardbound).**

This informal introduction provides a fresh perspective on isomorphism theory, which is the branch of ergodic theory that explores the conditions under which two measure-preserving systems are essentially equivalent. It contains a primer in basic measure theory, proofs of fundamental ergodic theorems, and material on entropy, martingales, Bernoulli processes, and various varieties of mixing.

Original proofs of class theorems – including the Shannon-McMillan-Breiman theorem, the Krieger finite generator theorem, and the Ornstein isomorphism theorem – are presented by degrees, together with helpful hints that encourage the reader to develop the proofs on their own. Hundreds of exercises and open problems are also included, making this an ideal text for graduate courses. Professionals needing a quick review, or seeking a different perspective on the subject, will also value this book.

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