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★ **Fractals in probability and analysis.**

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This book provides an excellent, broad introduction to the study of fractals that arise naturally in probability and analysis. As with many texts on fractals, it starts by setting out the classical notions of dimension (i.e., Minkowski, Hausdorff, packing) and the key basic techniques applied in their study, such as the mass distribution principle, and Frostman's theory and capacity. It then proceeds to introduce some of the well-known, central examples of fractals, namely self-affine sets, the Weierstrass nowhere differentiable function, and Brownian motion. Actually, the two introductory chapters on Brownian motion are relatively extensive, incorporating not only basic definitions and properties, such as nowhere differentiability and dimension, but also the deep links between Brownian motion and potential theory, as well as conformal invariance. Following this, the book goes on to cover more novel aspects of the subject, including the relationship between capacity and the hitting probabilities of discrete Markov processes, a discussion concerning Besicovitch-Kakeya sets, and a presentation of Jones' Travelling Salesman Theorem.

Being based on lecture series of the two authors, it is perhaps natural that the material is at an appropriate level for a graduate (or possibly advanced undergraduate) course. However, it is worth underlining that the text would serve this purpose extremely well. Indeed, the writing is very clear, with a focus on exposition of the main ideas, rather than the most advanced statements of results. Nonetheless, through this accessible approach, it manages to touch on several avenues of active research. (In fact, the book even provides some elegant, original proofs itself.) Moreover, all the main results are illustrated with numerous examples, and the text includes several hundred exercises at a range of difficulties, together with hints and solutions for a number of these. The historical notes are also richly informative.

Finally, I note that a list of typos/errors appears on the homepage of the first author.

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