

Singular Integrals and Differentiability Properties of Functions (PMS 30 Volume)

Singular integrals are a powerful tool for studying the behavior of functions. They can be used to characterize the differentiability of functions, to solve partial differential equations, and to study the behavior of functions on fractals. This book provides a comprehensive to singular integrals, with a focus on their applications to the study of the differentiability properties of functions.



Singular Integrals and Differentiability Properties of Functions (PMS-30), Volume 30 (Princeton Mathematical Series) by Elias M. Stein

★★★★☆ 4.1 out of 5

Language : English

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Screen Reader : Supported

Print length : 304 pages



The book begins with a discussion of the basic theory of singular integrals. This includes a discussion of the Hardy-Littlewood maximal function, the Calderón-Zygmund decomposition, and the T1 theorem. The book then goes on to discuss the applications of singular integrals to the study of the differentiability properties of functions. This includes a discussion of the Hölder continuity of functions, the Lipschitz continuity of functions, and the differentiability of functions.

The book is written in a clear and concise style, and it is suitable for graduate students and researchers in mathematics. It is also a valuable resource for anyone who is interested in learning more about singular integrals and their applications.

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References

- E. M. Stein, "Singular Integrals and Differentiability Properties of Functions," Princeton University Press, 1970.
- A. Zygmund, "Trigonometric Series," Cambridge University Press, 1959.

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