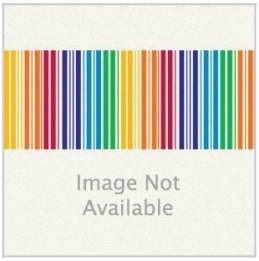

Theory of Stein Spaces (Grundlehren der mathematischen Wissenschaften)

By H. Grauert, R. Remmert

Theory of Stein Spaces (Grundlehren der mathematischen Wissenschaften)
By H. Grauert, R. Remmert

1. The classical theorem of Mittag-Leffler was generalized to the case of several complex variables by Cousin in 1895. In its one variable version this says that, if one prescribes the principal parts of a merom orphic function on a domain in the complex plane e, then there exists a meromorphic function defined on that domain having exactly those principal parts. Cousin and subsequent authors could only prove the analogous theorem in several variables for certain types of domains (e. g. product domains where each factor is a domain in the complex plane). In fact it turned out that this problem can not be solved on an arbitrary domain in em, m ~ 2. The best known example for this is a "notched" bicylinder in 2 2 e . This is obtained by removing the set { (z , z) E e 11 z I ~ !, I z 1 ~ !}, from 1 2 1 2 2 the unit bicylinder, ~ :={(z , z) E e llz1 < 1, lz1 < 1}. This domain D has 1 2 1 2 the property that every function holomorphic on D continues to a function holo morphic on the entire bicylinder. Such a phenomenon never occurs in the theory of one complex variable. In fact, given a domain G c e, there exist functions holomorphic on G which are singular at every boundary point of G.

Theory of Stein Spaces (Grundlehren der mathematischen Wissenschaften)

By H. Grauert, R. Remmert

Theory of Stein Spaces (Grundlehren der mathematischen Wissenschaften) By H. Grauert, R. Remmert

1. The classical theorem of Mittag-Leffler was generalized to the case of several complex variables by Cousin in 1895. In its one variable version this says that, if one prescribes the principal parts of a merom orphic function on a domain in the complex plane e, then there exists a meromorphic function defined on that domain having exactly those principal parts. Cousin and subsequent authors could only prove the analogous theorem in several variables for certain types of domains (e. g. product domains where each factor is a domain in the complex plane). In fact it turned out that this problem can not be solved on an arbitrary domain in em, m ~ 2. The best known example for this is a "notched" bicylinder in 2 2 e . This is obtained by removing the set { (z , z) E e 11 z I ~ !, I z 1 ~ !}, from 1 2 1 2 2 the unit bicylinder, ~ :={(z , z) E e llz1 < 1, lz1 < 1}. This domain D has 1 2 1 2 the property that every function holomorphic on D continues to a function holo morphic on the entire bicylinder. Such a phenomenon never occurs in the theory of one complex variable. In fact, given a domain G c e, there exist functions holomorphic on G which are singular at every boundary point of G.

Theory of Stein Spaces (Grundlehren der mathematischen Wissenschaften) By H. Grauert, R. Remmert Bibliography

- Rank: #2130744 in Books
- Published on: 1979-06-04
- Original language: English
- Number of items: 1
- Dimensions: .0" h x .0" w x .0" l, .0 pounds
- Binding: Hardcover
- 252 pages

Editorial Review

Review

"Theory of Stein Spaces provides a rich variety of methods, results, and motivations - a book with masterful mathematical care and judgement. It is a pleasure to have this fundamental material now readily accessible to any serious mathematician."
J. Eells in Bulletin of the London Mathematical Society (1980)

"Written by two mathematicians who played a crucial role in the development of the modern theory of several complex variables, this is an important book."
J.B. Cooper in Internationale Mathematische Nachrichten (1979)

Language Notes
Text: English, German (translation)

About the Author

Hans Grauert (b. 1930 in Harem /Ems, Germany) and Reinhold Remmert (b. 1930 in Osnabrück, Germany) met at the University of Münster, where they both studied mathematics and physics from 1949 to 1954. In 1950 they were invited by Heinrich Behnke and Karl Stein to attend their "Oberseminar", which was held on Saturdays, for 2 hours from 9 a.m.

Five years after the tragic events of World War 2, Behnke's old friend Henri Cartan visited Münster. His lecture on recent developments in the theory of "Several Complex Variables" was a real eye-opener for the young students and had a strongly formative influence on them: indeed this was to determine the course of their scientific research careers from then on.

In June 1954 Grauert and Remmert received their respective doctorates from the University of Münster. In 1957 they both became lecturer (Privatdozent) there. In 1959 resp. 1960, Grauert and Remmert were appointed full professors at Göttingen resp. Erlangen.

The original German edition of "Theory of Stein Spaces" was written at a time when complex spaces, coherent analytic sheaves and the so-called Theorems A and B had already become established notions and theorems. Dedicated to Karl Stein, the book was published in 1977, and the English edition was to follow in 1979. The first announcement of the book, in Springer's promotion, consisted of the picture reproduced on the inside cover flap of this book, taken during the boat trip of the annual Bonn Arbeitstagung some time earlier, showing three men on a boat, with the minimalistic caption "Grundlehren 227".

Users Review

From reader reviews:

Nancy Tandy:

People live in this new day of lifestyle always attempt to and must have the time or they will get large amount of stress from both daily life and work. So , once we ask do people have free time, we will say absolutely of course. People is human not really a robot. Then we request again, what kind of activity have you got when the spare time coming to anyone of course your answer can unlimited right. Then ever try this one, reading ebooks. It can be your alternative inside spending your spare time, the particular book you have read is usually Theory of Stein Spaces (Grundlehren der mathematischen Wissenschaften).

Jason Savage:

Playing with family inside a park, coming to see the ocean world or hanging out with close friends is thing that usually you will have done when you have spare time, after that why you don't try point that really opposite from that. One activity that make you not experiencing tired but still relaxing, trilling like on roller coaster you are ride on and with addition of information. Even you love Theory of Stein Spaces (Grundlehren der mathematischen Wissenschaften), you could enjoy both. It is great combination right, you still want to miss it? What kind of hang-out type is it? Oh can occur its mind hangout fellas. What? Still don't buy it, oh come on its identified as reading friends.

Luther Keller:

Are you kind of active person, only have 10 or maybe 15 minute in your morning to upgrading your mind proficiency or thinking skill possibly analytical thinking? Then you are receiving problem with the book than can satisfy your limited time to read it because this all time you only find e-book that need more time to be study. Theory of Stein Spaces (Grundlehren der mathematischen Wissenschaften) can be your answer since it can be read by you actually who have those short time problems.

James Pitts:

A lot of people said that they feel bored when they reading a e-book. They are directly felt the idea when they get a half regions of the book. You can choose the actual book Theory of Stein Spaces (Grundlehren der mathematischen Wissenschaften) to make your own personal reading is interesting. Your own skill of reading expertise is developing when you similar to reading. Try to choose easy book to make you enjoy to study it and mingle the idea about book and studying especially. It is to be initial opinion for you to like to open up a book and examine it. Beside that the book Theory of Stein Spaces (Grundlehren der mathematischen Wissenschaften) can to be your brand new friend when you're feel alone and confuse with what must you're doing of this time.

#AVIZGUDS6X4

Read Theory of Stein Spaces (Grundlehren der mathematischen Wissenschaften) By H. Grauert, R. Remmert for online ebook

Theory of Stein Spaces (Grundlehren der mathematischen Wissenschaften) By H. Grauert, R. Remmert Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Theory of Stein Spaces (Grundlehren der mathematischen Wissenschaften) By H. Grauert, R. Remmert books to read online.

Online Theory of Stein Spaces (Grundlehren der mathematischen Wissenschaften) By H. Grauert, R. Remmert ebook PDF download

Theory of Stein Spaces (Grundlehren der mathematischen Wissenschaften) By H. Grauert, R. Remmert Doc

Theory of Stein Spaces (Grundlehren der mathematischen Wissenschaften) By H. Grauert, R. Remmert Mobipocket

Theory of Stein Spaces (Grundlehren der mathematischen Wissenschaften) By H. Grauert, R. Remmert EPub

AVIZGUDS6X4: Theory of Stein Spaces (Grundlehren der mathematischen Wissenschaften) By H. Grauert, R. Remmert