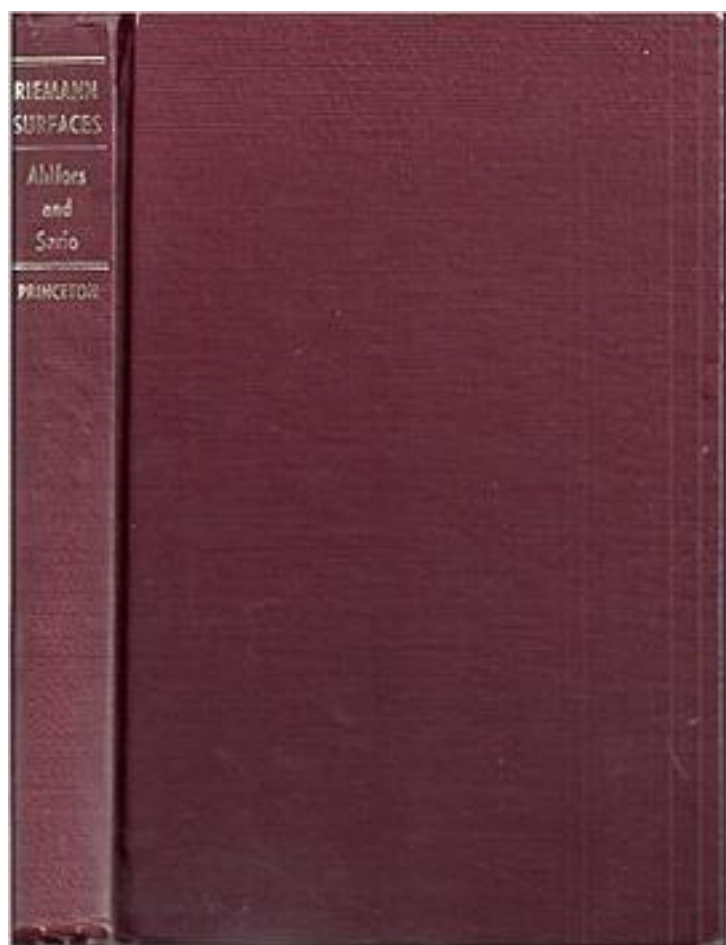


# Riemann Surfaces



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This graduate text on Riemann surface theory proves the fundamental analytical results on the existence of meromorphic functions and the Uniformisation Theorem. The approach taken emphasises PDE methods, applicable more generally in global

analysis. The connection with geometric topology, and in particular the role of the mapping class group, is also explained. To this end, some more sophisticated topics have been included, compared with traditional texts at this level. While the treatment is novel, the roots of the subject in traditional calculus and complex analysis are kept well in mind.

作者介绍:

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标签

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几何

黎曼面

Donalson

拓扑

分析

英国

评论

一份现代黎曼曲面讲稿：解析开拓是黎曼曲面理论最原始的出发点；全纯函数可以引出代数方程和微分方程的解，serre duality是最为核心的分析定理：代替了调和函数和积分存在性证明工具----GUNIING。现代语言环路积分提供了一个局部解的解析开拓，沿曲线解析延拓给了一个线性映射；投影空间讨论仿射曲线的渐进行为。关于黎曼罗赫定理最基础的证明是建立在预知亏格和极点的基础上。

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教材

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非常好的复分析后续教程。本科阶段看会受益匪浅。

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不会

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读完了前三部分

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