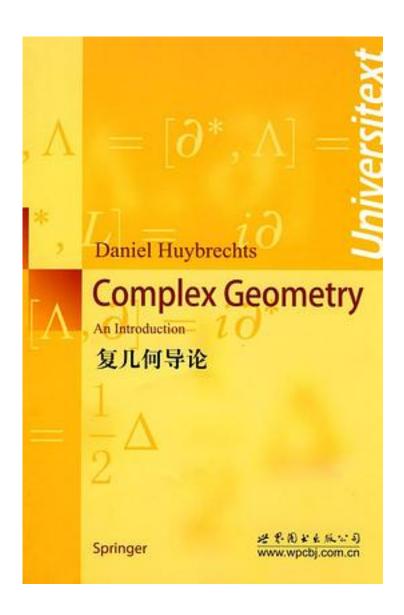
复几何导论



复几何导论_下载链接1_

著者:[德] Daniel Huybrechts

出版者:世界图书出版公司

出版时间:2010-1

装帧:

isbn:9787510004636

《复几何导论(英文版)》内容简介:Complex geometry is a highly attractive branch of modern mathematics that has witnessed many years of active and successful research and that has recently obtained new impetus from physicists' interest in questions related to mirror symmetry. Due to its interactions with various other fields (differential, algebraic, and arithmetic geometry, but also string theory and conformal field theory), it has become an area with many facets. Also, there are a number of challenging open problems which contribute to the subject's attraction. The most famous among them is the Hodge conjecture, one of the seven one-million dollar millennium problems of the Clay Mathematics Institute. So, it seems likely t at this area will fascinate new generations for many years to come.

作者介绍:

目录: 1 Local Theory 1

1.1 Holomorphic Functions of Several Variables 1

1.2 Complex and Hermitian Structures 25

1.3 Differential Forms 42 2 Complex Manifolds 51

2.1 Complex Manifolds: Definition and Examples 52

2.2 Holomorphic Vector Bundles 66

2.3 Divisors and Line Bundles 77

2.4 The Projective Space 91

2.5 Blow-ups 98

2.6 Differential Calculus on Complex Manifolds 104

3 Kahler Manifolds 113 3.1 Kahler Identities 114

3.2 Hodge Theory on Kahler Manifolds 125

3.3 Lefschetz Theorems 132

Appendix 145

3.A Formality of Compact Kahler Manifolds 145

3.B SUSY for Kahler Manifolds 155

3.C Hodge Structures 160

4 Vector Bundles 165

4.1 Hermitian Vector Bundles and Serre Duality 166

4.2 Connections 173 4.3 Curvature 182

4.4 Chern Classes 193

Appendix 206

4.A Levi-Civita Connection and Holonomy on Complex Manifolds . 206

4.B Hermite-Einstein and Kahler-Einstein Metrics 217

5 Applications of Cohomology 231 5.1 Hirzebruch-Riemann-Roch Theorem 231

5.2 Kodaira Vanishing Theorem and Applications 239

5.3 Kodaira Embedding Theorem 247

6 Deformations of Complex Structures 255

6.1 The Maurer-Cartan Équation 255

6.2 General Results 268

Appendix 275

6.A dGBV-Algebras 275

A Hodge Theory on Differentiate Manifolds 281

B Sheaf Cohomology 287

References 297

Index 303 • (收起)

复几何导论 下载链接1

标签

数学

复几何

complex_geometry

几何

数学物理

λÏ

algebraic-geometry

评论

本书关键是两本书《紧复曲面》和《代数几何原理》线丛同构类和微分层的上同调

类同构; 庞加莱引理 德拉姆复形层是局部常函数层的分解;关于层的定义的两个基本例子: 常数预层和向量 丛的截面层

,层相比与预层多了拓扑,层同态判断是单射还是满射取决于茎的单射或满射.向量丛和嵌入问题相关。投影空间之于复几何就像球之于微分几何,射影空间和线丛都是为了将复流形描述成为多项式的工具

想不到有朝一日也能学一学Hu老师的书,他的课我都不敢上。

<u>复几何导论_下</u>载链接1