CONVENTIONS

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Contents

1. Comments 1
2. Set theory 1
3. Categories 1
4. Algebra 1
5. Notation 1
6. Other chapters 2
References 3

1. Comments

The philosophy behind the conventions used in writing these documents is to choose those conventions that work.

2. Set theory

We use Zermelo-Fraenkel set theory with the axiom of choice. See [Kun83]. We do not use universes (different from SGA4). We do not stress set-theoretic issues, but we make sure everything is correct (of course) and so we do not ignore them either.

3. Categories

A category $\mathcal{C}$ consists of a set of objects and, for each pair of objects, a set of morphisms between them. In other words, it is what is called a “small” category in other texts. We will use “big” categories (categories whose objects form a proper class) as well, but only those that are listed in Categories, Remark 2.2.

4. Algebra

In these notes a ring is a commutative ring with a 1. Hence the category of rings has an initial object $\mathbb{Z}$ and a final object $\{0\}$ (this is the unique ring where $1 = 0$). Modules are assumed unitary. See [Eis95].

5. Notation

The natural integers are elements of $\mathbb{N} = \{1, 2, 3, \ldots\}$. The integers are elements of $\mathbb{Z} = \{\ldots, -2, -1, 0, 1, 2, \ldots\}$. The field of rational numbers is denoted $\mathbb{Q}$. The field of real numbers is denoted $\mathbb{R}$. The field of complex numbers is denoted $\mathbb{C}$.

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6. Other chapters

Preliminaries

1. Introduction
2. Conventions
3. Set Theory
4. Categories
5. Topology
6. Sheaves on Spaces
7. Sites and Sheaves
8. Stacks
9. Fields
10. Commutative Algebra
11. Brauer Groups
12. Homological Algebra
13. Derived Categories
14. Simplicial Methods
15. More on Algebra
16. Smoothing Ring Maps
17. Sheaves of Modules
18. Modules on Sites
19. Injectives
20. Cohomology of Sheaves
21. Cohomology on Sites
22. Differential Graded Algebra
23. Divided Power Algebra
24. Differential Graded Sheaves
25. Hypercoverings

Schemes

26. Schemes
27. Constructions of Schemes
28. Properties of Schemes
29. Morphisms of Schemes
30. Cohomology of Schemes
31. Divisors
32. Limits of Schemes
33. Varieties
34. Topologies on Schemes
35. Descent
36. Derived Categories of Schemes
37. More on Morphisms
38. More on Flatness
39. Groupoid Schemes
40. More on Groupoid Schemes
41. Étale Morphisms of Schemes

Topics in Scheme Theory

42. Chow Homology
43. Intersection Theory
44. Picard Schemes of Curves
45. Weil Cohomology Theories
46. Adequate Modules
47. Dualizing Complexes
48. Duality for Schemes
49. Discriminants and Differents
50. de Rham Cohomology
51. Local Cohomology
52. Algebraic and Formal Geometry
53. Algebraic Curves
54. Resolution of Surfaces
55. Semistable Reduction
56. Fundamental Groups of Schemes
57. Étale Cohomology
58. Crystalline Cohomology
59. Pro-étale Cohomology
60. More Étale Cohomology
61. The Trace Formula

Algebraic Spaces

62. Algebraic Spaces
63. Properties of Algebraic Spaces
64. Morphisms of Algebraic Spaces
65. Decent Algebraic Spaces
66. Cohomology of Algebraic Spaces
67. Limits of Algebraic Spaces
68. Divisors on Algebraic Spaces
69. Algebraic Spaces over Fields
70. Topologies on Algebraic Spaces
71. Descent and Algebraic Spaces
72. Derived Categories of Spaces
73. More on Morphisms of Spaces
74. Flatness on Algebraic Spaces
75. Groupoids in Algebraic Spaces
76. More on Groupoids in Spaces
77. Bootstrap
78. Pushouts of Algebraic Spaces

Topics in Geometry

79. Chow Groups of Spaces
80. Quotients of Groupoids
81. More on Cohomology of Spaces
82. Simplicial Spaces
83. Duality for Spaces
84. Formal Algebraic Spaces
85. Restricted Power Series
86. Resolution of Surfaces Revisited
Deformation Theory

(87) Formal Deformation Theory
(88) Deformation Theory
(89) The Cotangent Complex
(90) Deformation Problems

Algebraic Stacks

(91) Algebraic Stacks
(92) Examples of Stacks
(93) Sheaves on Algebraic Stacks
(94) Criteria for Representability
(95) Artin’s Axioms
(96) Quot and Hilbert Spaces
(97) Properties of Algebraic Stacks
(98) Morphisms of Algebraic Stacks
(99) Limits of Algebraic Stacks
(100) Cohomology of Algebraic Stacks
(101) Derived Categories of Stacks

(102) Introducing Algebraic Stacks
(103) More on Morphisms of Stacks
(104) The Geometry of Stacks

Topics in Moduli Theory

(105) Moduli Stacks
(106) Moduli of Curves

Miscellany

(107) Examples
(108) Exercises
(109) Guide to Literature
(110) Desirables
(111) Coding Style
(112) Obsolete
(113) GNU Free Documentation License

References
