

CONVENTIONS

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

6. Other chapters

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- Algebraic Spaces
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 - (84) More on Cohomology of Spaces
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 - (87) Formal Algebraic Spaces
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- Deformation Theory
- (90) Formal Deformation Theory
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 - (92) The Cotangent Complex
 - (93) Deformation Problems

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(96) Sheaves on Algebraic Stacks	(109) Moduli of Curves
(97) Criteria for Representability	Miscellany
(98) Artin's Axioms	(110) Examples
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(102) Limits of Algebraic Stacks	(114) Coding Style
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(104) Derived Categories of Stacks	(116) GNU Free Documentation License
(105) Introducing Algebraic Stacks	(117) Auto Generated Index
(106) More on Morphisms of Stacks	

References

- [Eis95] David Eisenbud, *Commutative algebra*, Graduate Texts in Mathematics, vol. 150, Springer-Verlag, 1995.
- [Kun83] Kenneth Kunen, *Set theory*, Elsevier Science, 1983.