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Chapter 10

1 message

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To: Joe Harris <harris@math.harvard.edu>, David Eisenbud <de@berkeley.edu>

Dear Joe and David,

Here are some thoughts on Chapter 10.

Best, Izzet

page 195, line 5 of 10.1, you use the construction 'to say what blah is' fairly often in the book. Is there a reason to avoid, 'to define the monodromy group and prove the uniform position lemma, we will use ...'?

The emperor told Mozart, 'There are too many notes'. Mozart replied, 'There are exactly as many notes as required.' With that in mind, there are too many words. Just to give a few examples from the first couple pages of this section:

In line 7 of 10.1, if you replace 'We may describe the monodromy group informally as follows: Suppose' with 'Informally, suppose ...', do you lose any of the meaning?

A little bit later, you can replace 'Now imagine that' with 'When'

In Cheerful Fact 10.1.1 'if we assume that Y is irreducible', could be 'if Y is irreducible'

I appreciate the chatty, friendly atmosphere you are creating, but you might want to edit the book to increase clarity and brevity.

Cheerful Fact 10.1.1, you said that $\deg f$ is the degree of the field extension in paragraph 1 of this section.

Just checking, is 1989 the date when Jordan's book was reissued/republished?

page 198, lemma 10.1.5, you are not consistent with n times transitive versus n -times transitive, you could consider n -transitive?

page 198, line 3 of the proof of 10.1.5, wouldn't it be better to say covering map instead of covering space map

page 198, line 4 of the proof of 10.1.5, should it be 'unions of connected components'?

page 199, last sentence of the proof of Lemma 10.2.2, one of the C_1 s should be C_2 .

last sentence of 10.2.2, Joe, didn't we spend a whole semester with Jason and Noam to prove that a general tangent line to a nondegenerate, irreducible curve in P^3 does not meet the curve again (hence, this holds in any P^n for $n \geq 3$). If I recall correctly, it turned out that this was known. I don't remember the reference, but Noam or Jason might have a record of this.

page 200, line 1, should it be 'second and third factors'?

page 200, line 1 of paragraph 3 of proof of 10.3.1, will lie \rightarrow lie

page 200, last line of the proof of 10.3.1, the loop exchanges q' and q'' and fixes ...

page 201, you can omit 'we have' before theorem 10.3.2

page 202, last sentence of the proof of 10.4.2, will lie \rightarrow lies, will have \rightarrow has

page 202, last sentence of 10.4.2, 'his must be true' \rightarrow this is true

page 202, line -3, you have a random period

page 203, paragraph before Proposition 10.4.4, we ask what its monodromy is \rightarrow we compute its monodromy

