

ERRATA

The following is a list of typos and mistakes that I made in the online lectures. These mistakes have already been corrected in the slides (and the lecture notes, if relevant).

- p5 (of the slides) middle r -times should be n -times
- p36 $\phi(R)$ should be $\phi(S)$
- p37 $(r/1)(m/1) = rm/1$ should be $(r/1)m = rm$
- p45 line 4 "be an exact complex" should be "be a complex" and "is iff" should be "is exact iff"
- p49 A/I replaced by R/I
- p69 reference to the next theorem (the Hilbert basis theorem) added
- p76 $S \subseteq A$ replaced by $S \subseteq B$
- p90 $\lambda_B : B \rightarrow B_{\mathbf{q}}$ replace by $\lambda_B : B \rightarrow B_{\mathbf{p}}$
- p90-91 replace $\phi_{\mathbf{q}}$ by $\phi_{\mathbf{p}}$ in two places
- p104 l-1 (and p28 l-9 of the notes) replace by "finite as a $K[y_1, \dots, y_t]$ -module"
- p118 beginning; replace $Q(c_1, \dots, c_t)$ by $Q(c_1, \dots, c_t) = 0$
- p155 l-2 replace $\lambda(\mathbf{q}^n)$ by $\lambda(\mathbf{q}^n)$
- p160: stricto sensu, the argument described in the lecture only works when the the height of \mathbf{p} is finite; a complement is needed to deal with the case where the height of \mathbf{p} is infinite (which is shown to be impossible in the end); see the proof of Corollary 1.15 in the notes.
- p164 the containment relations between the prime ideals in Cor. 0.43 should be strict; this has now been corrected.
- p184, l2 replace $\dim(R)$ by $\dim(R[x])$; also Aidan Gallagher pointed out to me that the proof of Th. 0.45 can be simplified; the simplified proof is now in the notes (but I left the longer proof in the slides in order not to disrupt the layout of the slides.
- p206 l-1,-2,-3 replace \mathbf{p} by \mathbf{q}