Errata to the thesis *Modular Forms of Weight One Over Finite Fields*
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- Lemma 2.4.3 is wrong. The mistake happens when I use the property *submersive*. It only implies that the image of open substacks under the projection is open. However, the cover on which the sheaf $\mathbb{V}$ is constant is made of etale surjective morphisms, which are, of course, not necessarily open immersions. So, it is not true that $\pi(V)$ is always open.

  As a consequence Proposition 2.4.4 (a) and (b) are only correct under the condition that the stabiliser orders are invertible (then it follows e.g. from group cohomology via Mayer-Vietoris).

  Proposition 2.4.8 (a) and (c) need the extra condition $2 \leq k \leq p+2$, which in the sequel we assume anyway. Under that condition, the proposition can be proved directly using group cohomology starting from the exact sequence of $R[\Gamma]$-modules

  $$0 \to V_{k-2}(R) \xrightarrow{\cdot p} V_{k-2}(R) \to V_{k-2}(\mathbb{F}_p) \to 0.$$

  Otherwise, this mistake does not have any consequence, in particular, Theorem 2.4.6, stays correct, as it does not use the zero on the right of the exact sequence on p. 22, l. 4. This zero, however, is now a consequence of Theorem 2.4.6 and Proposition 2.4.5.

- Remark 2.4.9. Replace the sheaf $\mathbb{V}_{k-2,\overline{\Gamma}}(R)$ by $\pi_*\mathbb{V}_{k-2,\overline{\Gamma}}(R)$.

- Proof of Proposition 2.5.5. In the last 4 lines on page 27, I mistakenly changed from right to left actions. As a consequence one formula must be corrected. Use instead the formula $1 - T - T' = 1 - \tau\sigma - \tau^2\sigma = 1 + \tau + \tau^2 - (\tau + \tau^2)(1 + \sigma)$, which works for right action.

- Proposition 2.5.7. Replace the capital V in lines 2 and 8 on page 29 by a small v.

- p. 34. In line -13 replace "right $\mathrm{PSL}_2(\mathbb{Z})$-action" by "right $\overline{G}$-action". In line -2 replace "right $\mathrm{SL}_2(\mathbb{Z})$-action" by "right G-action". In line -3 replace "right U-module" by "right $\langle T \rangle$-module".

- In Corollary 2.7.14. Replace "We furthermore suppose that $\overline{G}$ has no stabilisers..." by "We furthermore suppose that $\overline{\Gamma_p}$ has no stabilisers..."

- In the proof of Proposition 3.1.5 replace $H^1(\Gamma_1(N), V)$ by $H^1(\Gamma_1(N), \mathcal{W}(M, V))$.

- In Corollary 3.3.7 replace $H^1_{\mathrm{par}}(\Gamma_1(N), \mathbb{V}_{k-2}(\mathbb{F}_p))$ by $H^1_{\mathrm{par}}(\Gamma_1(N), V_{k-2}(\mathbb{F}_p))$.

- p. 53, l. -2: Replace $J[p](d)$ and $\mathrm{Cot}_0(J^0[p])(d)$ by $J_{\mathbb{F}_p}[p](d)$ resp. $\mathrm{Cot}_0(J^0_{\mathbb{F}_p}[p])(d)$.

- p. 58, l. 2: Replace "modular forms defined over K" by "modular forms defined over $\overline{K}$".

- p. 66, l. 12: Replace the second "of" by "or" (3 years in the Netherlands...).