

# Bibliography

## References for theorems and propositions that were not proved in the text

### CHAPTER 8

- [1] J. Silverman, *The Arithmetic of Elliptic Curves*, Graduate Texts in Math., Springer, **106**, 1986.
- [2] P. Deligne, M. Rapoport, *Les schémas de modules de courbes elliptiques*, in *Modular Functions of One Variable II*, Lecture Notes in Math., Springer, **349**, 1973, 143–316.
- [3] N. Katz, B. Mazur, *Arithmetic Moduli of Elliptic Curves*, Annals of Math. Studies, Princeton Univ. Press, **151**, 1994.
- [4] H. Hida, *Geometric modular forms and elliptic curves*, World Scientific, 2000.
- [5] B. J. Birch, W. Kuyk (eds.), *Modular Functions of One Variable IV*, Lecture Notes in Math., Springer, **476**, 1973.
  - ◇ Lemma 8.37: [2] III Corollaire 2.9, p.211, [3] Corollary 4.7.2.
  - ◇ Lemma 8.41:  $p = 2, 3$ : [1] Appendix A, Proposition 1.2 (c).
  - ◇ Example 8.65: [5] Table 6, p.143.
  - ◇ Proposition 8.69: [2] VII Costruction 1.15, p.297.
  - ◇ Theorem 8.77: [2] V Théorème 2.12, [3] Theorem 13.11.4.

### CHAPTER 9

- [6] H. Carayol, *Sur les représentations galoisiennes modulo  $\ell$  attachées aux formes modulaires*, Duke Math. J. 59 (1989), 785–801.
- [7] T. Miyake, *Modular forms*. Translated from the Japanese by Yoshitaka Maeda. Springer-Verlag, Berlin, 1989. x+335 pp.

- [8] K. Ribet, *On modular representations of  $\text{Gal}(\overline{\mathbf{Q}}/\mathbf{Q})$  arising from modular forms*, *Inventiones Math.*, **100** (1990), 431–476.
- ◇ Theorem 3.55(2) (ii)  $\Rightarrow$  (i): [6].
  - ◇ Theorem 9.40: [7] Corollary 4.6.20.
  - ◇ Theorem 3.55(1) (ii)  $\Rightarrow$  (i) the case  $p \equiv 1 \pmod{\ell}$ : [8].

## CHAPTER 10

- [9] J.-P. Serre, *Arbres, amalgames,  $SL_2$* , Astérisque 46, Société Mathématique de France, Paris, 1977.
- [10] ———, *Le problème des groupes de congruence pour  $SL_2$* , *Ann. of Math.* 92 (1970), 489–527.
- [11] L. E. Dickson, *Linear groups with an exposition of the Galois field theory*, Teubner, Leipzig, 1901.
- ◇ Theorem 10.15(1): [9] Chapitre II 1.4 Théorème 3 p.110.
  - ◇ Theorem 10.15(2): [10] 2.6 Corollaire 3 p.449 (If we let  $K = \mathbf{Q}$ ,  $S = \{p, \infty\}$ , and  $\mathfrak{q} = (N)$ , then we have  $\Gamma_{\mathfrak{q}} = \tilde{\Gamma}(N)$  and  $E_{\mathfrak{q}} = \tilde{E}(N)$ .)
  - ◇ Theorem 10.28: [11] sections 255, 260.

## CHAPTER 11

- [12] J.-P. Serre, *Corps Locaux*, 3e ed., Hermann, Paris, 1980.
- [13] ———, *Cohomologie galoisienne*, 5e ed., Lecture Notes in Math., Springer-Verlag, Berlin, **5**, 1994.
- [14] J. S. Milne, *Arithmetic duality theorems*, Perspectives in Math. 1, Academic Press, Boston, 1986.
- ◇ General theory of Galois cohomology and duality theorem: [4].
  - ◇ Proposition 11.11(1): [12] Chapitre X §3 b), (2): *ibid.*, Proposition 9.
  - ◇ Proposition 11.18: [14] Corollary 2.3.
  - ◇ Proposition 11.20: [14] Theorem 2.8.
  - ◇ Proposition 11.25(1): [14] Corollary 4.15.
  - ◇ Proposition 11.25(2): [14] Theorem 4.10.
  - ◇ Proposition 11.27: [14] Theorem 5.1.

## APPENDIX B

- [65] P. Deligne, N. Katz, *Groupes de Monodromie en Géométrie Algébrique* (SGA 7) II, Lecture Notes in Math., Springer, **340**, (1973).

Lemma B.4 (iii)  $\Rightarrow$  (i) The case where  $k$  is general: [65] Exp. XV, Théorème 1.2.6.

Lemma B.12: [65] Exp. X, Corollaire 1.8.

## APPENDIX C

- [15] J.-M. Fontaine, *Groupes  $p$ -divisible sur les corps locaux*, Astérisque 47–48, Soc. Math. de France, 1977.
- [16] J.-M. Fontaine, G. Laffaille, *Construction de représentations  $p$ -adiques*, Ann. Sci. École Norm. Sup. (4) 15 (1982), 547–608 (1983).
- [17] N. Wach, *Représentations cristallines de torsion*, Compositio Math. 108 (1997), 185–240.
- ◇ Theorem C.1:[15] Chapitre III.
- ◇ Theorem C.6:[16], [17].

## APPENDIX D

- [18] S. Mukai, *An introduction to invariants and moduli*, Translated from the 1998 and 2000 Japanese editions by W. M. Oxbury. Cambridge Studies in Advanced Mathematics, 81. Cambridge University Press, Cambridge, 2003. xx+503 pp.
- [19] M. Artin, *Néron models*, in G. Cornell, J. Silverman, (eds.), Arithmetic Geometry, Springer, 1986 pp.213–230.
- [20] J. S. Milne, *Jacobian varieties*, in G. Cornell, J. Silverman, (eds.), Arithmetic Geometry, Springer, 1986 pp.167–212.
- [21] S. Bosch, W. Lütkebohmert, M. Raynaud, *Néron models*, Springer, 1990.
- [22] M. Raynaud, *Jacobienne des courbes modulaires et opérateurs de Hecke*, in “Courbes modulaires et courbes de Shimura”, Astérisque 196–197, Soc. Math. de France, 1991, 9–25.

- [23] A. Grothendieck, *Modèles de Néron et monodromie*, in Groupes de Monodromie en Géométrie Algébrique, SGA 7I, Lecture Notes in Math., Springer, **288**, 1972, 313–523. Proposition 5.13.
- ◇ Jacobians and Néron models: [19], [20], [21]
  - ◇ Curves and their Jacobians: [18] Chapter 8.
  - ◇ Abel's theorem: [18] Theorem 9.8.6.
  - ◇ Theorem D.3: [21] Theorems 8.4/3 and 9.3/1.
  - ◇ Theorem D.7: [21] Theorem 8.2/3 and Propositions 9.2/5 and 10.
  - ◇ Theorem D.8: [21] Corollary 1.3/1.
  - ◇ Proposition D.12: [22], Proposition 6.
  - ◇ Theorem D.17(1)  $\ell \neq p$ : [21] Theorem 7.4/5 (b) $\Leftrightarrow$ (d).
  - ◇ Theorem D.17(2)  $\ell \neq p$ : [21] Theorem 7.4/6.
  - ◇ Theorem D.17(2)  $\ell = p$ : [23] Proposition 5.13.
  - ◇ Theorem D.19(1): [21] Theorem 9.5/4, p.267.
  - ◇ Theorem D.19(2): [21] Theorem 9.6/1, p.274.