

Nepal Algebra Project(NAP)
Central Department of Mathematics
Tribhuvan University, Kirtipur, Kathmandu, Nepal
Fields and Galois Theory

Course Instructor: Prof. Nick Gill

Summary of NAP: Module 3, Lecture 1

- We restated the Fundamental Theorem of Galois Theory. We also stated a version for field extensions that are not Galois (this is not in Milne).
- We discussed Example 3.21 of Milne, calculating the full lattice of intermediate fields in the extension $\mathbb{Q}[\zeta]/\mathbb{Q}$ where ζ is a primitive 7^{th} root of unity.
- Review of fundamental concepts from group theory, Notion of a "transitive permutation group", Statement of the Orbit-Stabilizer Theorem, which proof was left as an exercise.