

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

Course Instructor: Prof. Michel Waldschmidt

Summary of NAP:Module 4 - Lecture 5

- Recall: Galois group of a separable polynomial of degree ≤ 3 .
- Study of the Galois group of a reducible polynomial of degree 4. Examples: $(X^2 + 1)(X^2 - 2X + 2)$ and $(X^2 + 1)(X^2 - 2)$.
- Subgroups of \mathfrak{S}_4 . Order and signature of a permutation decomposed into product of disjoint cycles.