NAP 2018 Module III Lecture 1 Monday, June 4, 2018, 16:30 – 18:00.

Introduction to Galois work. Solving equations by radicals. Fields, extensions; subfields. Question: which are the subfields of  $\mathbb{Q}$ ?

Characteristic of a field. Field with 4 elements. Construction by hand, next as stem field of  $X^2 + X + 1$  over  $\mathbb{F}_2$ .

Proof of the fact that the number of elements of a finite field is  $p^r$  where p is the characteristic and r the dimension of the field as a vector space over the prime field.