Math 422

Location & time: MWF 2-3pm, MATX 1102
Instructor: V. Vatsal
Office: Math 222c.

This course will be an introduction to the Galois theory of fields. The main goal will be to understand when a given polynomial equation is solvable by radicals, i.e, whether there exists a "formula" such as the familiar formula for the roots of a quadratic equation, that gives the solution of the equation.

The main references for the course are the freely available notes by J. Milne:

http://www.jmilne.org/math/CourseNotes/ft.html

The goal is to cover at least chapters 1-5 of these notes.

A further reference is the book "Basic Algebra I," by Nathan Jacobson. This book has been placed on hold in the library.

There will be weekly homework and a 2.5 hour final exam. There will be no midterm exam. The course grade will be computed as 40% on the HW and 60% on the final. The worst homework will be dropped.