## Honors Thesis Defense

The Artin-Schreier Theorem in Galois Theory

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**Abstract:** We first list and state some basic definitions and theorems of the Galois theory of finite extensions, as well as state and prove the Kummer theory and the Artin-Schreier extensions as prerequisites. The main part of this thesis is the proof of the Artin-Schreier Theorem, which states that an algebraic closed field having finite extension with its subfield F has degree at most two and F must have characteristic 0. After the proof, we will discuss the applications for the Artin-Schreier Theorem.

Thursday, March 30, 2017, 1:00 pm Mathematics and Science Center: W303

Advisor: Suresh Venapally

## MATHEMATICS AND COMPUTER SCIENCE EMORY UNIVERSITY