LTCC Proposed Course

- Title: Algebraic number theory

- Basic Details:
  - Core Audience: Pure
  - Course Format: Basic/core (10 hours)

- Course Description:
  - Keywords: algebraic integers, ideal class groups, units, $p$-adic numbers, zeta functions, class number formulas, cyclotomic fields
  - Syllabus: This course gives a non-technical introduction to some important topics in algebraic number theory. After introducing the basic objects (algebraic integers, ideals and ideal class groups, units) we will discuss $p$-adic numbers and local-global principles, zeta functions and class number formulas, and cyclotomic fields. The only prerequisite is some knowledge of basic ring theory.

  - Recommended reading:

  - Additional Optional reading:

  - Prerequisites: Basic knowledge of ring theory.

- Format:
  - No of problem sheets:
  - Electronic lecture notes:
  - Necessary support facilities
  - necessary software requirements for computing facilities.
  - Proposed timing: early spring, 10.30–12.30
  - Lecture/computer session/tutorial/discussion h split: / / / /

- Lecturer Details:
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