Introduction to Formal Proof
Synopsis of Materials

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Trinity Term, 2018

Abstract

This is a synopsis of the headings of the slides/notes from which the material presented in our ten lectures will be selected.

There is probably more material than can be covered properly in ten lectures without rushing. The extra material is intended to provide extra reading for those interested in further study of logic and formal proof.

It should be clear from the syllabus and the two tutorial sheets which of the material is **examinable**, and the style in which it will be examined.

0: Introduction and Overview

Preliminary remarks
- Course Overview
- Case Study: three presentations of an equational proof
- Stylized presentation with compressed transitive rules
- Inference tree presentation
- Linearized presentation

1: Formal Proofs in Propositional Calculus

2: Proofs *about* Propositional Calculus

3: Predicate Logic (Semantics)

4: Formal Proofs in Predicate Logic

5: Theories

Typeset at 15:28 March 12, 2018
synopsis.tex[721] of 15:28 March 12, 2018