

AC.lean

Johannes Korbmacher

November 15, 2024

This is a proof of concept project that aims to verify the results of:

- Fine, Kit. 2016. "Angelic Content." In: *Journal of Philosophical Logic* 45: 199–226.

in Lean4.

The goal is to show that for the purposes of research in philosophical logic, Lean4 is:

- Easy to learn and use.
- Powerful enough to formalize and verify the results of a recent paper in philosophical logic.
-

0.1 Roadmap

The following are the main results of the paper that we aim to formalize:

Definition 1. A *propositional formula* is one constructed from sentence-letters p_1, p_2, \dots by means of the connectives \neg, \wedge and \vee .