

# Decidability of isomorphism

## Proposition

*Type isomorphism is undecidable in System F (Haskell) and intuitionistic type theory (Idris).*

## Proof.

- *Claim:* A type is isomorphic to  $\perp$  if and only if it is uninhabited.
- Type inhabitation is undecidable in System F and intuitionistic type theory.

