

# Foundations - type theory

October 28, 2025

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## 1 Deductive system

### 1.1 Contexts

**Definition 0.1.** We will note  $\cdot$  for the empty context

**Axiom 0.1.** empty derivation :  $rule\_empty\_derivation : \epsilon \text{ --- empty context } ctx$

**Axiom 0.2.** context extension :  $rule\_context\_extension : context\_gamma \vdash var\_A : Type_i \text{ --- context\_var\_A } ctx, var\_x \text{ not in } dom(context\_gamma)$