```
def is_perfectoid (X : CLVRS) : Prop :=
  ∀ x : X, ∃ (U : opens X) (A : Huber_pair) [perfectoid_ring A],
    (x ∈ U) ∧ (Spa A ≡ U)
```

—The definition of a perfectoid space in Lean

The Trivial Notions Seminar

Proudly Announces

The Calculus of Constructions

A talk by

Grant Barkley

Abstract

I'll tell you how saying "A is of type B" can encode all of modern mathematics, and why a mathematician might want to do such a thing. An introduction to dependent type theory with inductive constructions and how the Lean/Coq theorem provers use it.

Friday, October 23$^{\text{rd}}$, at 12 noon