

Three for One

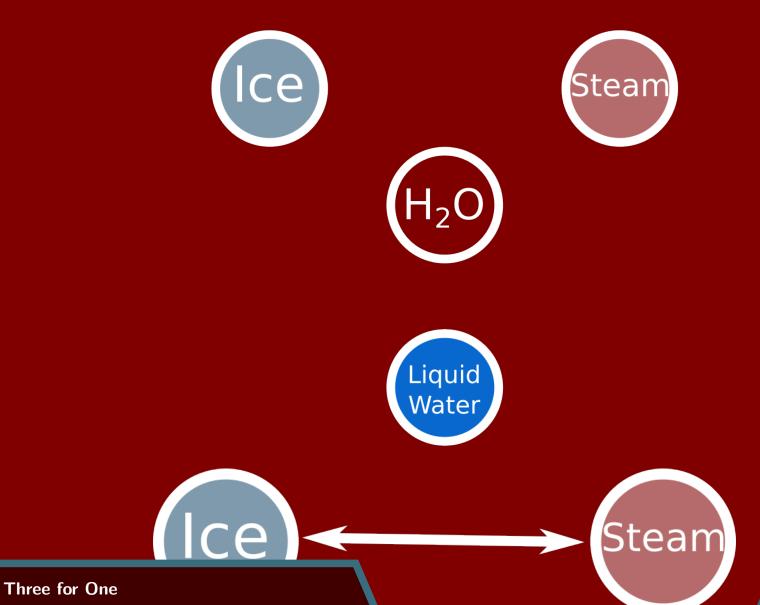
Intro to Homotopy Type Theory, No. 1



A riddle...



Solution: ce



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Previously on Intro to HoTT...

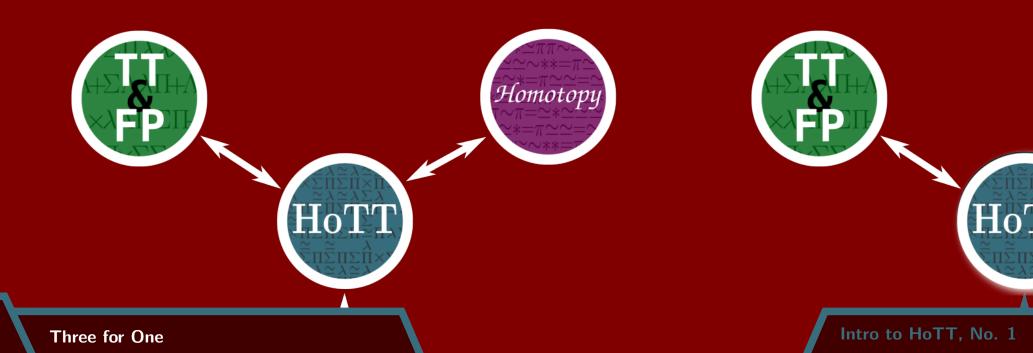
3 Three for One

Theorems are types? Proofs are terms? What's homotopy theory? What's its connection to homotopy *type* theory?

Computational Trinitarianism

Three understandings of what HoTT "means": Programming Interpretation

- Homotopy Interpretation
- Logic Interpretation



This video: 1

unit is the contractible type









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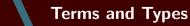
Three for One

O Terms and Types

The Typing Judgment



"t is a term of type T"



Example: natural numbers

N is a type 0 : N, 1 : N, 2 : N, 3 : N, ...

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- Typing judgment (between terms and types)
- Types
- Terms
- ____

Language of HoTT so far

Next Time

Formalizing HoTT in Agda Judgments and Judgmental Equality

To be continued...

Designed, written, and performed by Jacob Neumann

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