# **Distinguished Lecture Serie**

## **Emily Riehl** John Hopkins University

Friday February 10, 2023

3:30 PM

Live streamed on Zoom



### A Reintroduction to Proofs

In an introduction to proofs course, students learn to write proofs informally in the language of set theory and classical logic. In this talk, I'll explore the alternate possibility of teaching students to write proofs informally in the language of dependent type theory. I'll argue that the intuitions suggested by this formal system are closer to the intuitions mathematicians have about their praxis. Furthermore, dependent type theory is the formal system used by many computer proof assistants both "under the hood" to verify the correctness of proofs and in the vernacular language with which they interact with the user. Thus, students could practice writing proofs in this formal system by

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interacting with computer proof assistants such as Coq and Lean.

### Live streamed on Zoom. Register in advance for link: <a href="https://uregina-ca.zoom.us/meeting/register/tJYrce6grzstHtPC6-JZKLPzbn\_aFukL0141">https://uregina-ca.zoom.us/meeting/register/tJYrce6grzstHtPC6-JZKLPzbn\_aFukL0141</a>

Mathematics and Statistics





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