Identifying the Linguistic Conventions of Undergraduate Proof Writing

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1:00 pm in DERR 238
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Abstract: I studied the linguistic conventions of mathematical proof writing at the university level by asking mathematicians and university students to read seven partial proofs based on student-generated work and to identify and discuss uses of mathematical language that were out of the ordinary with respect to what they considered standard mathematical proof writing. Data from a survey of 128 mathematicians is used to discuss the extent to which a larger sample of mathematicians agree with regard to these linguistic conventions of mathematical proof writing.

Dr. Lew received her Ph. D. from Rutgers University and is an Assistant Professor at Texas State University. Dr. Lew’s main research goal is to better understand the communicative aspect of mathematical proofs: how mathematicians present proofs and how students write them, with an emphasis on the language of mathematical proofs and how undergraduate students come to understand the conventions of this mathematical language. Some of her recent projects focus on mathematicians’ and students’ identification of unconventional uses of mathematical language in student-constructed proofs and assembling several corpora of professional and student-constructed mathematical text.

Next Friday Sept. 22: Christina Koehne, Xiaowen Cui, Texas State University