



**Idaho State
University**

**Mathematics
and Statistics**

Undergraduate Colloquium



Using Contrasting Prompts to Facilitate Student Comprehension of Undergraduate Mathematical Topics

Mathematics educators and organizations have promoted the practice of facilitating student-centered mathematical discussions for decades (e.g., NCTM, 2000, 2014; Smith & Stein, 2018). One method to introduce and promote discussion activities is using contrasting prompts (Roh & Eckman, in preparation). Contrasting prompts consist of two or more mathematical claims by hypothetical students about a particular topic, which classroom students interpret and debate. In this talk, I present three instances of contrasting prompts in the contexts of graphs of sequences, set-builder notation, and the definition of sequence convergence. I also discuss the criteria for creating effective contrasting prompts, instructor strategies for introducing a contrasting prompt activity and reacting to students' interpretation of the prompts.

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**Tuesday, December 5
4:00 pm**

PS 308 (or) Zoom Meeting ID 83918530990

For colloquium guests, refreshments begin at 3:30 pm in PS 308.