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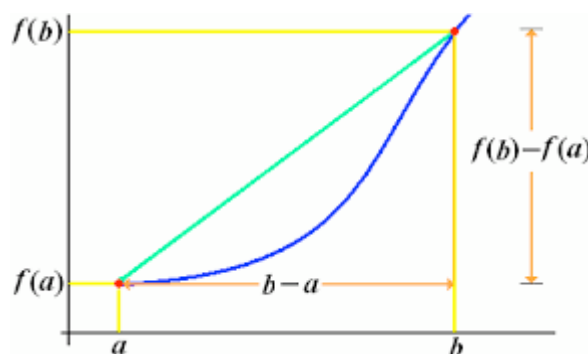
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## *Undergraduate Math and Physics Seminar*

Mathematical Meanings: An investigation into ways of thinking about average rate of change and consequences for teaching

**Assistant Professor Dr. Stacy M. Musgrave**  
*California State Polytechnic University*

**Abstract:** *Mathematical meanings* consist of the ways of thinking and mental imagery an individual has for a mathematical idea. Among other things, an individual's meaning for a given idea dictates the examples an individual can generate about that idea, the connections the individual makes to other ideas, and the language that the individual uses to communicate about the idea. In this presentation, I will share various meanings for the idea of average rate of change. As these meanings were conveyed during clinical interviews with undergraduate mathematics instructors, specifically mathematics graduate student teaching assistants, I will further discuss implications for teaching and learning in undergraduate mathematics courses and the professional development of future mathematics instructors.



*When:* Monday, April 25, 2016, 4:30-5:20 pm

*Where:* CSUCI, Del Norte 1530

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