



CRMSE Brown Bag Talk

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Epistemologies of Mathematics

Thursday, February 16, 2017
12:00 – 1:00 pm
6475 Alvarado Road, Suite 128



RSVP: <https://crmse.wufoo.com/forms/crmse-colloquia/> or
Email kfoehl@mail.sdsu.edu

Abstract: Many scholars have studied what people think about the nature of mathematical knowledge and truth. Some have studied the kinds of evidence used to support claims, some have focused on the sources of authority, some on the actual process of building personal conviction, and others on patterns in ways that this knowledge is vetted in social contexts. As I understand them, these research programs focus on particular items of mathematical truth/knowledge to look for patterns in the kinds of evidence or processes of reasoning that support items in general. These research programs have all produced important and interesting results, but I think there is also room to ask more global questions. What do people believe about the nature of mathematical truth and knowledge? In what ways do mathematical experts and novices differ in these beliefs? Do advanced math majors think about these questions like experts? If not, can interventions change these beliefs? And many more. I have made some preliminary attempts to gather data as I clarify my thinking about these questions. In this session, we will "get our hands dirty" with some of my methods and data. I hope that you will enjoy the reflection on your own thinking and teaching and that I will get ideas (and possible collaborators) for this project.

