



CRMSE Colloquium Announcement

Dr. Fred Goldberg

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Following Student Thinking in a Physics Course for Prospective Elementary Teachers that Aligns with the Next Generation Science Standards

Friday, April 10, 2015
1:00-2:00 pm
6475 Alvarado Road, Room 128

RSVP: <https://crmse.wufoo.com/forms/crmse-colloquia/> or
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Abstract: *Next Generation Physics and Everyday Thinking* is a set of curriculum materials that align with the spirit and substance of the Next Generation Science Standards. The curriculum is intended for use in a variety of courses or workshops (science or science methods course for pre-service elementary teachers, general education science course, or workshop for in-service teachers), and for use in either small class or large class, lecture style, learning environments. The pedagogical structure of *Next Gen PET* is based on design principles from research on the teaching and learning of science and provides multiple opportunities for students to articulate their ideas and reasoning. This semester we are videotaping a local implementation of the curriculum in a classroom with over 80 students. In this talk I will briefly review the research-based design principles, show classroom video clips that will allow the audience to follow students' thinking (in both small groups and the whole class) as they develop a robust model to explain magnetism phenomena, and engage the audience in a conversation about the connections between the pedagogical structure of the curriculum, the design principles and the Next Generation Science Standards.

