SEMINAR IN PHYSICS

Friday, April 12 Ross 0220 3:30 – 4:45

The Innovation Hyperlab — A Framework for Involving both K-12 Students and Undergraduates in Research

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We are creating a special lab at a high school in Aurora that will be equipped with supplies and equipment to support a wide variety of physics-based projects that connect with active research at CU-Denver. Also, several projects are aimed at technical innovation inspired by local industry and by healthcare professionals. Examples include the control of swinging of a cable from a rescue helicopter, modeling behavior of neurons, and creation of a robotic horse to study ideas about self-organization of different gait patterns. Other projects connect research with high school physics curriculum, such as nonlinear mode-locking of a motor to a vibrating guitar string. The ultimate goal is to inspire students to pursue science and engineering careers by including them in genuine research projects as early as possible.