

## **IUPUI Department of Physics Presents:**

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**University of Illinois at Urbana-Champaign**

### **Reviving Creativity in Our Introductory Physics Labs**

**Thursday,**

**September 28, 2017\* 3:30pm,**

**LD 010**

**402 N. Blackford Street**

**Refreshments at 3:00 pm in the Physics Conference Room LD 154B**

**For additional information call 274-6900**



### **Abstract:**

Approaching a question without fear; coming up with an idea; designing an experiment; understanding assumptions; interpreting data and revising the idea (or the question) accordingly. Many physicists would claim they do this for a living, and most would be delighted to observe this behavior in their students, yet for a variety of reasons this is often not what we encourage in our introductory physics labs.

We have developed a portable wireless lab system with the goal of putting simple yet powerful tools in the hands of every student, and we are currently piloting a new design-based approach to our introductory physics labs based on this tool. Our students invent experiments and acquire data, both in and out of the classroom, and share their data with each other and with instructors using an integrated cloud based repository. This new approach is allowing us to shift the focus of our introductory labs toward creativity, design, sense-making, and communication. I will describe this project and present some encouraging first results.

\*Physics colloquium is scheduled for 2016-17 academic year for every Thursday, 3:30 PM in LD 010. Changes to the schedule will be posted at

[www.physics.iupui.edu](http://www.physics.iupui.edu)