

# Promoting usable skills and analysis methods via introductory physics labs

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Science students encounter multiple challenges with employment or upper level courses thus teaching them solid lab skills and analysis provide needed solid foundation. The lab for intro-level Physics I and II must provide students with practical experience and laboratory skills that would be further developed by upper-level courses.

A new approach was instituted to provide meaningful lab experience to students. This presentation will overview the experiments and the innovative methodology using open-source tracker software [physlets.org/tracker](https://physlets.org/tracker). This new approach expanded the number of possible experiments, provided students with ability to conduct some of the simple experiments at home using common household items, and gives a backup option in the case of possible restrictions to students access of lab facilities. The lab topics make a progression that introduces additional skills to students such as use of software for data analysis, error analysis methods, making a presentation, etc.

## Alternate track

1. Equality, Diversity and Inclusion

## I read the instructions above

Yes

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