



Contribution ID: 19

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Innovations in teaching of the Physics and Astronomy laboratories

Saturday, July 9, 2022 2:30 PM (15 minutes)

The laboratory section included with the introductory Physics and Astronomy courses provide a student with the practical experience and initial laboratory skills that would be further honed by higher level courses. The quality and variety of that experience as well as the practical applicability are important. Since the start of the current pandemic and restrictions on lab sessions (later replaced with limitation of number of students attending), a new approach had to be found to provide a meaningful lab experience to students. This presentation will show the new experiments and the innovative methodology that were introduced with the use of the tracker software (<https://physlets.org/tracker/>) in the introductory Physics I, II and Introductory Astronomy laboratory. This new methodology not only expanded the number of possible lab experiments, but provided students with ability to conduct some of the simple experiments at home using common household items, thus offering not only the exciting experience to students but also the backup option in the case of further restrictions to students attendance of lab facilities.

In-person participation

No

Primary authors: Mr IAKOVLEV, Alexander (CCS); BEZNOSKO, Dmitriy (Clayton State University); Prof. KRIVOSHEEV, Tatiana (Clayton State University)

Presenter: BEZNOSKO, Dmitriy (Clayton State University)

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