

Contribution ID: 209

Type: Poster Presentation

## Students' approaches to solving problems kinematic problems

Tuesday, 9 July 2019 15:00 (20 minutes)

The purpose of this research study is to investigate how to address the under-preparedness of students entering first year physics in South African universities, particularly with regard to their competence in solving kinematics problems. Previous studies show that the best tool for changing and expanding the conceptual understanding of a learner is problem solving; it assists a learner in dealing with new and unfamiliar concepts. These studies have also shown that cooperative learning helps students to share knowledge with each other. This research study thus investigated students' approaches in solving kinematic problems and also observed the effects of expert problem-solving approaches and cooperative learning on the performance and results obtained by students in the first-year mainstream physics at the University of the Western Cape. The findings of the study will be presented and discussed.

## Apply to be<br/>br> considered for a student <br/>br> &nbsp; award (Yes / No)?

No

Level for award<br/>
d-br>&nbsp;(Hons, MSc, <br>
&nbsp; PhD, N/A)?

NC

Primary authors: Dr HERBERT, Mark (University of the Western Cape); Ms TANCI, Sinovuyo (University of

the Western Cape)

**Presenter:** Dr HERBERT, Mark (University of the Western Cape)

Session Classification: Physics Education

Track Classification: Track E - Physics Education