63rd ANNUAL CONFERENCE OF THE SA INSTITUTE OF PHYSICS



Contribution ID: 249

Type: Oral Presentation

How do students use the knowledge of conservative and non-conservative forces when solving work and energy theorem problems?

Tuesday, 26 June 2018 12:00 (20 minutes)

The concept of conservative force and non-conservative forces play a vital role in solving problems related to the application of the principle of conservation of energy and momentum, but they are generally ignored when solving quantitative problems. First year students usually assumed that the system is isolated even if isolated case has to be proven first before the equation is used. The study explores if students are using the knowledge of conservative and non-conservative forces when approaching problems dealing with work and energy theorem.

Please confirm that you
br>have carefully read the
dr>abstract submission instructions
br>under the menu item
br>"Call for Abstracts"
br>cyles / No)</br/>/b>

Yes

Consideration for

student awards

choose one option

from those below.

N/A

Hons

MSc

PhD

N/A

Supervisor details

br>

brit not a student, type N/A.

br>Student abstract submision

br>requires supervisor permission:

br>please give their name,

institution and email address.

N/A

Primary author: Mr MOLEFE, Paul (University of Johannesburg)

Co-author: Mr KHWANDA, Mphiriseni (University of Johannesburg)

Presenter: Mr MOLEFE, Paul (University of Johannesburg)

Session Classification: Physics Education

Track Classification: Track E - Physics Education