

SAIP2022

Monday 04 July 2022

Physics for Development, Education and Outreach - Zoom Platform (11:30-13:00)

-Conveners: Alan Cornell

time	[id] title	presenter
11:45	[22] LEVERAGING DESIGN THINKING AND SYSTEMS THINKING APPROACH IN PHYSICS EDUCATION RESEARCH	Ms NSHIMWE, Ngwende Rethabile
12:00	[113] Challenges pre-service students have while practicing to answer questions using context-content alignment problem-solving strategy	MOLEFE, Paul Mr KHWANDA, Mphiriseni SONDEZI, Buyi
12:15	[138] A modal approach to teaching and understanding paraxial light propagation	MOODLEY, Chané Simone
12:30	[249] Students' understanding of physical components of electrical circuits.	KHWANDA, Mphiriseni MOLEFE, Paul SONDEZI, Buyi
12:45	[297] Flippin Amazing?	Dr WARD, Kebra WESTRAADT, Lindsay

Physics for Development, Education and Outreach - Zoom Platform (15:00-16:30)

-Conveners: Paul Molefe

time	[id] title	presenter
15:00	[308] High School learners' difficulties with kinematics graphs	Mr PHAGE, Itumeleng
15:15	[211] Astronomy for development: past, present & future	MCBRIDE, Vanessa
15:30	[300] Creating Support for Tutoring Physical Sciences and Mathematics: A Collaboration Between Metro South Education District and the Department of Physics and Astronomy	Mr AUDU, Bako Nyikun
15:45	[298] Teacher's perceptions of Modeling Instruction for the South African classroom	Dr HERBERT, Mark
16:00	[62] Language in learning. How far can we teach Physics in isiZulu?	FISH, Derek

Thursday 07 July 2022

Physics for Development, Education and Outreach - Zoom Platform (11:30-13:00)

-Conveners: Buyi Sondezi

time	[id] title	presenter
11:45	[23] LEVERAGING QUANTUM MACHINE LEARNING IN FINANCE	TSHIDI, MOTSHIDISI
12:00	[19] Correlations between matric marks and mechanics misconceptions	CORNELL, Alan NAYLOR, Wade
12:15	[11] Exploring the impact of teacher education programme on the development of pre-service science teachers' TPACK	Mrs NDUMANYA, Emmanuela
12:30	[136] Assessment of energy supply and use in households of Mudavula village in Collins Chabane Municipality in Limpopo province.	MBUYISA, Busisiwe
12:45	[209] The impact of simulation experiments on the understanding of the concepts of acceleration and energy	EWUOLA, Oluwatoyin

Physics for Development, Education and Outreach - Zoom Platform (15:00-16:30)

-Conveners: Itumeleng Phage

time	[id] title	presenter
15:00	[10] The inclusion of nature of science in grade 12 high-stakes physics assessments in South Africa	RAMNARAIN, Umesh
15:15	[25] Online teaching in the digital age	LETARTE, Bruno
15:30	[233] Water Quality Assessment Using Graph Convolutional Neural Networks	SENEKANE, Makhamisa
15:45	[258] The effects of monitored peer teaching and learning on the understanding of basic Physics concepts.	SONDEZI, Buyi KHWANDA, Mphiriseni MOLEFE, Paul

Friday 08 July 2022

Physics for Development, Education and Outreach - Zoom Platform (11:30-13:00)

-Conveners: Deena Naidoo

time	[id] title	presenter
11:30	[281] Teach electronics to applied physics students. Prototyping, design and research on a printed circuit board.	Dr MARIOLA, Marco
11:45	[296] The effects of expert problem solving on first-year mainstream physics students' performance and results	Dr HERBERT, Mark
12:00	[353] Using a Kibble balance to explain physics principles in education	MNDEBELE, Landile Floyd