The Scientific Program of ASP2021

African School of Fundamental Physics and Applications

Report of Contributions

https://indico.cern.ch/e/812393

Contribution ID: **475** Type: **not specified**

The big & small picture: links between particle physics and cosmology

Monday, 19 July 2021 12:00 (1 hour)

Presenter: ELLIS, Jonathan R. (University of London (GB))

Contribution ID: **476** Type: **not specified**

Particle Matter Interactions

Monday, 19 July 2021 13:30 (1 hour)

Other

High Performance Computing

Renewable Energies & Energy Efficiency

Materials Physics & nanoscience

Physics Education and Communication

Particle Physics

Nuclear Physics

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Light Sources and their Applications

Presenter: SEIDEL, Sally (University of New Mexico (US))

Contribution ID: **477** Type: **not specified**

Particle Matter Interactions

Other

High Performance Computing

Renewable Energies & Energy Efficiency

Materials Physics & nanoscience

Physics Education and Communication

Particle Physics

Nuclear Physics

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Light Sources and their Applications

Presenter: SEIDEL, Sally (University of New Mexico (US))

Contribution ID: **478** Type: **not specified**

Accelerators

Monday, 19 July 2021 16:30 (1 hour)

Other

High Performance Computing

Renewable Energies & Energy Efficiency

Materials Physics & nanoscience

Physics Education and Communication

Particle Physics

Nuclear Physics

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Light Sources and their Applications

Presenter: WANG, Gang (BNL)

Contribution ID: **479** Type: **not specified**

Keynote Address: My Life In and Out of Physics

Monday, 19 July 2021 17:30 (1 hour)

ABSTRACT:
A reflection on the trajectory and surprising breadth of a life enabled by mathematical and theoretical physics.

Light Sources and their Applications

Other

Materials Physics & nanoscience

Physics Education and Communication

High Performance Computing

Renewable Energies & Energy Efficiency

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Particle Physics

Nuclear Physics

Presenter: Prof. GATES, Sylvester James (Brown Univerity)

Contribution ID: **480** Type: **not specified**

Standard Model of Particle Physics

Tuesday, 20 July 2021 12:00 (1 hour)

Other

High Performance Computing

Renewable Energies & Energy Efficiency

Materials Physics & nanoscience

Physics Education and Communication

Particle Physics

Nuclear Physics

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Light Sources and their Applications

Presenter: Prof. DJOUADI, Abdelhak (University of Granada (Spain))

Contribution ID: **481** Type: **not specified**

Standard Model of Particle Physics

Tuesday, 20 July 2021 13:30 (1 hour)

Other

High Performance Computing

Renewable Energies & Energy Efficiency

Materials Physics & nanoscience

Physics Education and Communication

Particle Physics

Nuclear Physics

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Light Sources and their Applications

Presenter: Prof. DJOUADI, Abdelhak (University of Granada (Spain))

Contribution ID: **482** Type: **not specified**

Beyond the Standard Model of Particle Physics

Tuesday, 20 July 2021 15:00 (1 hour)

Other

High Performance Computing

Renewable Energies & Energy Efficiency

Materials Physics & nanoscience

Physics Education and Communication

Particle Physics

Nuclear Physics

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Light Sources and their Applications

Presenter: Prof. DJOUADI, Abdelhak (University of Granada (Spain))

Contribution ID: **483** Type: **not specified**

Accelerators

Tuesday, 20 July 2021 16:30 (1 hour)

Light Sources and their Applications

Other

Materials Physics & nanoscience

Physics Education and Communication

High Performance Computing

Renewable Energies & Energy Efficiency

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Particle Physics

Nuclear Physics

Presenter: Dr WANG, Gang (Stony Brook University)

Contribution ID: **484** Type: **not specified**

Daily Discussion

Tuesday, 20 July 2021 17:30 (30 minutes)

Contribution ID: **485** Type: **not specified**

Nuclear Physics

Wednesday, 21 July 2021 12:00 (1 hour)

Other

High Performance Computing

Renewable Energies & Energy Efficiency

Materials Physics & nanoscience

Physics Education and Communication

Particle Physics

Nuclear Physics

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Light Sources and their Applications

Presenter: DALTON, Mark (Jefferson Lab)

Contribution ID: **486** Type: **not specified**

Astrophysics

Wednesday, 21 July 2021 13:30 (1 hour)

Other

High Performance Computing

Renewable Energies & Energy Efficiency

Materials Physics & nanoscience

Physics Education and Communication

Particle Physics

Nuclear Physics

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Light Sources and their Applications

Presenter: PRESCOD-WEINSTEIN, Chanda (University of New Hampshire)

Contribution ID: **487** Type: **not specified**

Cosmology

Wednesday, 21 July 2021 15:00 (1 hour)

Other

High Performance Computing

Renewable Energies & Energy Efficiency

Materials Physics & nanoscience

Physics Education and Communication

Particle Physics

Nuclear Physics

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Light Sources and their Applications

Presenter: PRESCOD-WEINSTEIN, Chanda (University of New Hampshire)

Contribution ID: **488** Type: **not specified**

Detectors

Monday, 19 July 2021 15:00 (1 hour)

Other

High Performance Computing

Renewable Energies & Energy Efficiency

Materials Physics & nanoscience

Physics Education and Communication

Particle Physics

Nuclear Physics

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Light Sources and their Applications

Presenter: SEIDEL, Sally (University of New Mexico (US))

Contribution ID: **489** Type: **not specified**

Daily Discussion

Wednesday, 21 July 2021 17:30 (30 minutes)

Contribution ID: **490** Type: **not specified**

Materials Physics

Friday, 23 July 2021 12:00 (1 hour)

Other

High Performance Computing

Renewable Energies & Energy Efficiency

Materials Physics & nanoscience

Physics Education and Communication

Particle Physics

Nuclear Physics

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Light Sources and their Applications

Presenter: Prof. HADDAD, Sonia (University of Tunis El Manar)

Contribution ID: **491** Type: **not specified**

Medical Physics

Thursday, 22 July 2021 13:30 (1 hour)

Other

High Performance Computing

Renewable Energies & Energy Efficiency

Materials Physics & nanoscience

Physics Education and Communication

Particle Physics

Nuclear Physics

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Light Sources and their Applications

Presenter: AVERY, Stephen (University of Pennsylvania)

Contribution ID: **492** Type: **not specified**

Heavy Ion Physics

Thursday, 22 July 2021 15:00 (1 hour)

Other

High Performance Computing

Renewable Energies & Energy Efficiency

Materials Physics & nanoscience

Physics Education and Communication

Particle Physics

Nuclear Physics

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Light Sources and their Applications

Presenter: BUTHELEZI, Edith Zinhle (iThemba LABS, National Research Foundation (ZA))

Contribution ID: **493** Type: **not specified**

Break

Contribution ID: **494** Type: **not specified**

High Performance Computing / Big Data

Thursday, 22 July 2021 16:30 (1 hour)

Other

High Performance Computing

Renewable Energies & Energy Efficiency

Materials Physics & nanoscience

Physics Education and Communication

Particle Physics

Nuclear Physics

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Light Sources and their Applications

Presenter: Prof. YU, Jae (University of Texas at Arlington (US))

Contribution ID: **495** Type: **not specified**

Daily Discussion

Thursday, 22 July 2021 17:30 (30 minutes)

Contribution ID: **496** Type: **not specified**

The Little Neutral One

Friday, 23 July 2021 13:30 (1 hour)

An introduction to neutrino history and discoveries

Other

High Performance Computing

Renewable Energies & Energy Efficiency

Materials Physics & nanoscience

Physics Education and Communication

Particle Physics

Nuclear Physics

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Light Sources and their Applications

Presenter: BISHAI, Mary (Brookhaven National Laboratory)

Contribution ID: **497** Type: **not specified**

Flavor Physics

Thursday, 22 July 2021 12:00 (1 hour)

Other

High Performance Computing

Renewable Energies & Energy Efficiency

Materials Physics & nanoscience

Physics Education and Communication

Particle Physics

Nuclear Physics

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Light Sources and their Applications

Presenter: CAMPANELLI, Mario (University College London (UK))

Contribution ID: **498** Type: **not specified**

Statistical Analysis

Friday, 23 July 2021 15:00 (1 hour)

Light Sources and their Applications

Other

Materials Physics & nanoscience

Physics Education and Communication

High Performance Computing

Renewable Energies & Energy Efficiency

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Particle Physics

Nuclear Physics

Presenter: GROSS, Eilam (Weizmann Institute of Science (IL))

Contribution ID: **499** Type: **not specified**

Statistical Analysis

Friday, 23 July 2021 16:30 (1 hour)

Light Sources and their Applications

Other

Materials Physics & nanoscience

Physics Education and Communication

High Performance Computing

Renewable Energies & Energy Efficiency

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Particle Physics

Nuclear Physics

Presenter: GROSS, Eilam (Weizmann Institute of Science (IL))

Contribution ID: **500** Type: **not specified**

Daily Discussion

Friday, 23 July 2021 17:30 (30 minutes)

Contribution ID: **501** Type: **not specified**

Parallel Session 1: Accelerators

Monday, 26 July 2021 12:00 (1 hour)

Light Sources and their Applications

Other

Materials Physics & nanoscience

Physics Education and Communication

High Performance Computing

Renewable Energies & Energy Efficiency

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Particle Physics

Nuclear Physics

Presenter: WANG, Gang (BNL)

Contribution ID: **502** Type: **not specified**

Parallel session 2: Materials Physics

Monday, 26 July 2021 12:00 (1 hour)

Other

High Performance Computing

Renewable Energies & Energy Efficiency

Materials Physics & nanoscience

Physics Education and Communication

Particle Physics

Nuclear Physics

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Light Sources and their Applications

Presenter: Prof. HADDAD, Sonia (University of Tunis El Manar)

Contribution ID: **503** Type: **not specified**

Parallel Session 1: Accelerators

Monday, 26 July 2021 13:30 (1 hour)

Light Sources and their Applications

Other

Materials Physics & nanoscience

Physics Education and Communication

High Performance Computing

Renewable Energies & Energy Efficiency

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Particle Physics

Nuclear Physics

Presenter: Dr WANG, Gang (BNL)

Contribution ID: **504** Type: **not specified**

Parallel session 2: Materials Physics

Monday, 26 July 2021 13:30 (1 hour)

Other

High Performance Computing

Renewable Energies & Energy Efficiency

Materials Physics & nanoscience

Physics Education and Communication

Particle Physics

Nuclear Physics

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Light Sources and their Applications

Presenter: Prof. HADDAD, Sonia (University of Tunis El Manar)

Contribution ID: **505** Type: **not specified**

Parallel Session 1: Detectors

Monday, 26 July 2021 15:00 (1 hour)

Other

High Performance Computing

Renewable Energies & Energy Efficiency

Materials Physics & nanoscience

Physics Education and Communication

Particle Physics

Nuclear Physics

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Light Sources and their Applications

Presenter: Prof. SEIDEL, Sally (University of New Mexico (US))

Contribution ID: **506** Type: **not specified**

Parallel session 2: Understanding the main relations of galaxies

Monday, 26 July 2021 15:00 (1 hour)

Brief summary: This lecture will introduce us to an amazing and diverse world of galaxies and some of their main properties. We will see how different properties of galaxies can be related to specific galaxy types, and how different relations can help us in disentangling the picture of galaxy formation and evolution.

Other

High Performance Computing

Renewable Energies & Energy Efficiency

Materials Physics & nanoscience

Physics Education and Communication

Particle Physics

Nuclear Physics

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Light Sources and their Applications

Presenter: Prof. POVIC, Mirjana (Ethiopian Space Science and Technology Institute (ESSTI))

Contribution ID: **507** Type: **not specified**

Parallel Session 1: LHC Analysis - Event Reconstruction

Tuesday, 27 July 2021 12:00 (1 hour)

Other

High Performance Computing

Renewable Energies & Energy Efficiency

Materials Physics & nanoscience

Physics Education and Communication

Particle Physics

Nuclear Physics

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Light Sources and their Applications

Presenter: CAMPANELLI, Mario (UCL)

Contribution ID: **508** Type: **not specified**

Parallel session 2: An amazing world of active galaxies

Monday, 26 July 2021 16:30 (1 hour)

Brief summary: Active galaxies are some of the brightest sources in the Universe in almost all parts of the electromagnetic spectrum, and therefore, very important for studying how the Universe was in its early stages and how galaxies formed and evolved throughout cosmic time. They are characterised by very complex and particular physics, and their research has contributed in recent decades to important technological developments that nowadays have application in different fields such as medicine, agriculture, or communications. During this talk, we will go through the general properties of active galaxies, a standard model of active galactic nuclei (AGN), AGN types, the role of AGN in the current models of galaxy evolution, but also through the importance of AGN research.

Other

High Performance Computing

Renewable Energies & Energy Efficiency

Materials Physics & nanoscience

Physics Education and Communication

Particle Physics

Nuclear Physics

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Light Sources and their Applications

Presenter: Prof. POVIC, Mirjana (Ethiopian Space Science and Technology Institute (ESSTI))

Contribution ID: **509** Type: **not specified**

Daily Discussion

Monday, 26 July 2021 17:30 (30 minutes)

Contribution ID: **510** Type: **not specified**

Parallel Session 1: LHC Analyses - Event Triggers

Tuesday, 27 July 2021 10:30 (1 hour)

(Chair : Ketevi Assamagan)

Other

High Performance Computing

Renewable Energies & Energy Efficiency

Materials Physics & nanoscience

Physics Education and Communication

Particle Physics

Nuclear Physics

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Light Sources and their Applications

Presenter: CAMPANELLI, Mario (University College London (UK))

Contribution ID: **511** Type: **not specified**

Parallel Session 2: Astronomy for development in Africa

Tuesday, 27 July 2021 12:00 (1 hour)

Brief summary: Africa has an amazing potential due to natural and human resources for scientific research in astronomy and space science. At the same time, the continent is still facing many difficulties, and many of its countries are now recognizing the importance of astronomy, space science, and satellite technologies for improving some of their main socio-economic and environmental challenges. The status of astronomy and space science in Africa changed significantly over the past years, and never before it was more possible to use astronomy for development as it is nowadays. This talk will summarise different activities carried out for education, science, and technological development, and show how through them we can fight poverty in the long term, and increase in future our possibilities of attaining the United Nations Sustainable Development Goals (SDGs) for the benefit of our all society.

Other

High Performance Computing

Renewable Energies & Energy Efficiency

Materials Physics & nanoscience

Physics Education and Communication

Particle Physics

Nuclear Physics

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Light Sources and their Applications

Presenter: Prof. POVIC, Mirjana (Ethiopian Space Science and Technology Institute (ESSTI))

Contribution ID: **512** Type: **not specified**

Parallel Session 1: LHC Analyses - Particle Identification

Monday, 26 July 2021 16:30 (1 hour)

Other

High Performance Computing

Renewable Energies & Energy Efficiency

Materials Physics & nanoscience

Physics Education and Communication

Particle Physics

Nuclear Physics

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Light Sources and their Applications

Presenter: Prof. SEIDEL, Sally (University of New Mexico (US))

Contribution ID: **513** Type: **not specified**

Parallel Session 2: Nanoscience

(Chair : Anne Dabrowski)

Other

High Performance Computing

Renewable Energies & Energy Efficiency

Materials Physics & nanoscience

Physics Education and Communication

Particle Physics

Nuclear Physics

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Light Sources and their Applications

Presenter: Prof. MAAZA, Malik (iThemba Labs)

Contribution ID: **514** Type: **not specified**

Parallel Session 1: LHC Analyses - Background Estimation

Tuesday, 27 July 2021 13:30 (1 hour)

Other

High Performance Computing

Renewable Energies & Energy Efficiency

Materials Physics & nanoscience

Physics Education and Communication

Particle Physics

Nuclear Physics

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Light Sources and their Applications

Presenter: CAMPANELLI, Mario (University College London (UK))

Contribution ID: **515** Type: **not specified**

Parallel session 2: Nanoscience

Other

High Performance Computing

Renewable Energies & Energy Efficiency

Materials Physics & nanoscience

Physics Education and Communication

Particle Physics

Nuclear Physics

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Light Sources and their Applications

Presenter: Prof. MAAZA, Malik (iThemba Labs)

Contribution ID: **516** Type: **not specified**

Parallel Session 1: LHC Analyses - Systematic Uncertainties

Tuesday, 27 July 2021 16:30 (1 hour)

Other

High Performance Computing

Renewable Energies & Energy Efficiency

Materials Physics & nanoscience

Physics Education and Communication

Particle Physics

Nuclear Physics

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Light Sources and their Applications

Presenter: CAMPANELLI, Mario (University College London (UK))

Contribution ID: **517** Type: **not specified**

Parallel session 2: Physics Education

Tuesday, 27 July 2021 16:30 (1 hour)

Other

High Performance Computing

Renewable Energies & Energy Efficiency

Materials Physics & nanoscience

Physics Education and Communication

Particle Physics

Nuclear Physics

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Light Sources and their Applications

Presenter: CECIRE, Kenneth William (University of Notre Dame (US))

Contribution ID: **518** Type: **not specified**

Daily Discussion

Tuesday, 27 July 2021 17:30 (30 minutes)

Contribution ID: **519** Type: **not specified**

Parallel Session 1: Deep Learning

Wednesday, 28 July 2021 12:00 (1 hour)

Light Sources and their Applications

Other

Materials Physics & nanoscience

Physics Education and Communication

High Performance Computing

Renewable Energies & Energy Efficiency

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Particle Physics

Nuclear Physics

Presenter: GROSS, Eilam (Weizmann Institute of Science (IL))

Contribution ID: **520** Type: **not specified**

Parallel session 2: Fluid & Plasma Physics

Other

High Performance Computing

Renewable Energies & Energy Efficiency

Materials Physics & nanoscience

Physics Education and Communication

Particle Physics

Nuclear Physics

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Light Sources and their Applications

Presenter: FOSTER, John (The University of Michigan)

Contribution ID: **521** Type: **not specified**

Parallel Session 2: Optics & Photonics

Wednesday, 28 July 2021 12:00 (1 hour)

Other

High Performance Computing

Renewable Energies & Energy Efficiency

Materials Physics & nanoscience

Physics Education and Communication

Particle Physics

Nuclear Physics

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Light Sources and their Applications

Presenter: Dr CHERIF, Rim (Université de Carthage)

Contribution ID: **522** Type: **not specified**

Parallel Session1: Nuclear Physics

Wednesday, 28 July 2021 13:30 (1 hour)

Other

High Performance Computing

Renewable Energies & Energy Efficiency

Materials Physics & nanoscience

Physics Education and Communication

Particle Physics

Nuclear Physics

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Light Sources and their Applications

Presenter: DALTON, Mark (Jefferson Lab)

Contribution ID: **523** Type: **not specified**

Parallel Session 1: Nuclear Physics

Wednesday, 28 July 2021 15:00 (1 hour)

Other

High Performance Computing

Renewable Energies & Energy Efficiency

Materials Physics & nanoscience

Physics Education and Communication

Particle Physics

Nuclear Physics

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Light Sources and their Applications

Presenter: DALTON, Mark (Jefferson Lab)

Contribution ID: **524** Type: **not specified**

Parallel session 2: Atomic & Molecular Physics

Wednesday, 28 July 2021 13:30 (1 hour)

Other

High Performance Computing

Renewable Energies & Energy Efficiency

Materials Physics & nanoscience

Physics Education and Communication

Particle Physics

Nuclear Physics

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Light Sources and their Applications

Presenter: Dr ABAH, Obinna (Queens U. Belfast)

Contribution ID: **525** Type: **not specified**

Parallel Session 1: Physics Education

Wednesday, 28 July 2021 16:30 (1 hour)

Other

High Performance Computing

Renewable Energies & Energy Efficiency

Materials Physics & nanoscience

Physics Education and Communication

Particle Physics

Nuclear Physics

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Light Sources and their Applications

Presenter: CECIRE, Kenneth William (University of Notre Dame (US))

Contribution ID: **526** Type: **not specified**

Parallel Session 2: Atomic & Molecular Physics

Wednesday, 28 July 2021 15:00 (1 hour)

Other

High Performance Computing

Renewable Energies & Energy Efficiency

Materials Physics & nanoscience

Physics Education and Communication

Particle Physics

Nuclear Physics

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Light Sources and their Applications

Presenter: Dr ABAH, Obinna (Queens U. Belfast)

Contribution ID: **527** Type: **not specified**

Daily Discussion

Wednesday, 28 July 2021 17:30 (30 minutes)

Contribution ID: **528** Type: **not specified**

Plenary Session: Poster Presentations

Thursday, 29 July 2021 13:30 (1 hour)

During this Poster session, the student will give a 10-minute presentation followed by 5 min of questions.

"Step, dip, and bell-shape traveling waves in a (2 + 1)-chemotaxis model with traction and long-range diffusion"
By KUIPOU Domgno (Cameroon)

"Radiation Dose to the Closest Critical Organ during External Beam Radiotherapy of Head & Neck, Breast and Cervix at the University College Hospital, Ibadan, Nigeria"
By Adenuga Temitope (Nigeria)

"Theoretical Investigation of the Molecular Structure, Vibrational Spectra, Thermodynamic and nonlinear Optical Properties of 4',5'-dibromo-2',7'-dinitro-fluorescin"
By Jean Baptiste Fankam Fankam (Cameroon)

"Analysis and monitoring of the performance of different solar photovoltaic technologies in an arid zone for the optimization of instantaneous production and the preservation of performance over time"
By Heyine Mohamed Saleck (Mauritania)

Other

High Performance Computing

Renewable Energies & Energy Efficiency

Materials Physics & nanoscience

Physics Education and Communication

Particle Physics

Nuclear Physics

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Light Sources and their Applications

Presenters: DARVE, Christine (European Spallation Source); ASSAMAGAN, Ketevi Adikle (Brookhaven National Laboratory (US))

Contribution ID: **529** Type: **not specified**

Parallel session 2: Quantum Information

Thursday, 29 July 2021 16:30 (1 hour)

Other

High Performance Computing

Renewable Energies & Energy Efficiency

Materials Physics & nanoscience

Physics Education and Communication

Particle Physics

Nuclear Physics

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Light Sources and their Applications

Presenter: Prof. TELMINI, Mourad (University of Tunis El Manar)

Contribution ID: **530** Type: **not specified**

Parallel Session 2: Optics & Photonics

Thursday, 29 July 2021 12:00 (1 hour)

Other

High Performance Computing

Renewable Energies & Energy Efficiency

Materials Physics & nanoscience

Physics Education and Communication

Particle Physics

Nuclear Physics

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Light Sources and their Applications

Presenter: Dr CHERIF, Rim (Université de Carthage)

Contribution ID: **531** Type: **not specified**

Parallel session 2: Quantum Information

Friday, 30 July 2021 16:30 (1 hour)

Other

High Performance Computing

Renewable Energies & Energy Efficiency

Materials Physics & nanoscience

Physics Education and Communication

Particle Physics

Nuclear Physics

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Light Sources and their Applications

Presenter: Prof. TELMINI, Mourad (University of Tunis El Manar)

Contribution ID: **532** Type: **not specified**

Parallel Session 1: Physics at underground facilities

Thursday, 29 July 2021 15:00 (1 hour)

Presenter: Prof. FERRONI, Fernando (INFN-GSSI)

Contribution ID: **533** Type: **not specified**

Parallel session 2: Earth Science

Thursday, 29 July 2021 10:30 (1 hour)

(Chair : Anne Dabrowski)

Other

High Performance Computing

Renewable Energies & Energy Efficiency

Materials Physics & nanoscience

Physics Education and Communication

Particle Physics

Nuclear Physics

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Light Sources and their Applications

Presenter: Dr VON DER HEYDEN, Bjorn (University of Stellenbosch)

Contribution ID: **534** Type: **not specified**

Parallel Session 1: Physics at underground facilities

Thursday, 29 July 2021 16:30 (1 hour)

Presenter: Prof. FERRONI, Fernando (INFN-GSSI)

Contribution ID: **535** Type: **not specified**

Parallel session 2: Earth Science

Thursday, 29 July 2021 12:00 (1 hour)

Other

High Performance Computing

Renewable Energies & Energy Efficiency

Materials Physics & nanoscience

Physics Education and Communication

Particle Physics

Nuclear Physics

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Light Sources and their Applications

Presenter: Dr VON DER HEYDEN, Bjorn (University of Stellenbosch)

Contribution ID: **536** Type: **not specified**

Daily Discussion

Thursday, 29 July 2021 17:30 (30 minutes)

Contribution ID: **537** Type: **not specified**

Parallel Session 1: Medical Physics

Friday, 30 July 2021 12:00 (1 hour)

Other

High Performance Computing

Renewable Energies & Energy Efficiency

Materials Physics & nanoscience

Physics Education and Communication

Particle Physics

Nuclear Physics

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Light Sources and their Applications

Presenter: Prof. SEBIHI, RAJAA (Mohammed V University)

Contribution ID: **538** Type: **not specified**

Parallel session 2: Light Sources

Other

High Performance Computing

Renewable Energies & Energy Efficiency

Materials Physics & nanoscience

Physics Education and Communication

Particle Physics

Nuclear Physics

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Light Sources and their Applications

Presenter: Dr D'ALMEIDA , Thierry (X-Tech Labs (Benin))

Contribution ID: **539** Type: **not specified**

Parallel Session 1: Medical Physics

Friday, 30 July 2021 13:15 (1h 15m)

with complementary comments by Marco Silari (CERN)

Other

High Performance Computing

Renewable Energies & Energy Efficiency

Materials Physics & nanoscience

Physics Education and Communication

Particle Physics

Nuclear Physics

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Light Sources and their Applications

Presenter: Prof. SEBIHI, RAJAA (Mohammed V University)

Contribution ID: **540** Type: **not specified**

Parallel Session 1: Biophysics

Friday, 30 July 2021 15:00 (1 hour)

Other

High Performance Computing

Renewable Energies & Energy Efficiency

Materials Physics & nanoscience

Physics Education and Communication

Particle Physics

Nuclear Physics

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Light Sources and their Applications

Presenter: Prof. KRUGER, Tjaart (University of Pretoria)

Contribution ID: **541** Type: **not specified**

Parallel Session 2: Energy Applications & Energy Efficiency

Friday, 30 July 2021 15:00 (1 hour)

Other

High Performance Computing

Renewable Energies & Energy Efficiency

Materials Physics & nanoscience

Physics Education and Communication

Particle Physics

Nuclear Physics

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Light Sources and their Applications

Presenter: Dr EGBE, Daniel Ayuk (ANSOLE)

Contribution ID: **542** Type: **not specified**

Parallel Session 1: Biophysics

Friday, 30 July 2021 16:30 (1 hour)

Other

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Materials Physics & nanoscience

Physics Education and Communication

Particle Physics

Nuclear Physics

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Light Sources and their Applications

Presenter: Prof. KRUGER, Tjaart (University of Pretoria)

Contribution ID: **543** Type: **not specified**

Parallel session 2: Energy Applications & Energy Efficiency

Thursday, 29 July 2021 15:00 (1 hour)

Other

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Physics Education and Communication

Particle Physics

Nuclear Physics

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Light Sources and their Applications

Presenter: Dr EGBE, Daniel Ayuk (ANSOLE)

Contribution ID: **544** Type: **not specified**

Guest of Honor Address - Mohammed V University, Morocco

Monday, 19 July 2021 10:00 (15 minutes)

Other

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Materials Physics & nanoscience

Physics Education and Communication

Particle Physics

Nuclear Physics

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Light Sources and their Applications

Presenters: Prof. REGRAGUI , Mohammed (Mohammed V University in Rabat); Prof. EL HAJJAJI , Souad (Mohammed V University in Rabat)

Contribution ID: **545** Type: **not specified**

Guest of Honor Address - Cadi Ayyad University, Morocco

Monday, 19 July 2021 10:15 (15 minutes)

Light Sources and their Applications

Other

Materials Physics & nanoscience

Physics Education and Communication

High Performance Computing

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Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Particle Physics

Nuclear Physics

Presenters: Prof. IFLAHEN, Fatima-Zahra (Vice-President in charge of research and International relations); Prof. HBIB, Hassan (President, Cadi Ayyad University, Marrakesh Morocco)

Contribution ID: **546** Type: **not specified**

The African Strategy for Fundamental and Applied Physics (ASFAP)

Monday, 19 July 2021 10:30 (25 minutes)

Other

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Nuclear Physics

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Light Sources and their Applications

Presenter: Prof. KA, Oumar (Cheikh Anta Diop University, Senegal)

Contribution ID: **547** Type: **not specified**

ASP COVID-19 Analyses

Tuesday, 20 July 2021 10:00 (1h 30m)

Other

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Materials Physics & nanoscience

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Nuclear Physics

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Astrophysics & Cosmology

Light Sources and their Applications

Presenter: Dr AZOTE, Somiéalo (Ca' Foscari University)

Contribution ID: **548** Type: **not specified**

ASP Brainstorming Session

Wednesday, 21 July 2021 10:45 (45 minutes)

Where or how can [physics / and a physicist make the biggest positive impact in your countries / communities

What are the most important problems or questions that physicist can contribute to solving in your country/ region etc

What are the biggest challenges for you for a career in physics

How this particular African School of Physics benefit your studies and or career - what are your expectations from the school

How can the Africa School of Physics evolve / adapt to better serve the needs of your country / region or stage in your career

Please add you feedback to this google document:

https://docs.google.com/document/d/1EtWrMunfsyTcDsCcBqiBWwlemp6Br_s0rPyFGbWukeY/edit?usp=sharing

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Astrophysics & Cosmology

Light Sources and their Applications

Presenter: DABROWSKI, Anne (CERN)

Contribution ID: **549** Type: **not specified**

Radiation Measurements and Dosimetry

Thursday, 22 July 2021 10:00 (1h 30m)

(Chair : Christine Darve)

Light Sources and their Applications

Other

Materials Physics & nanoscience

Physics Education and Communication

High Performance Computing

Renewable Energies & Energy Efficiency

Accelerator, Radiation & Medical Applications

Astrophysics & Cosmology

Particle Physics

Nuclear Physics

Presenter: SILARI, Marco (CERN)

Contribution ID: **550** Type: **not specified**

ASP User Experience with DataCamp

Friday, 23 July 2021 10:00 (25 minutes)

(Chair : Farida Fassi)

Light Sources and their Applications

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Particle Physics

Nuclear Physics

Presenter: MAPEKULA, Xola (University of Johannesburg (ZA))

Contribution ID: **551** Type: **not specified**

African Young Physicists Forum

Friday, 23 July 2021 10:30 (25 minutes)

Light Sources and their Applications

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Astrophysics & Cosmology

Particle Physics

Nuclear Physics

Presenter: Dr LAASSIRI, Mounia (Mohammed V University)

Contribution ID: **552** Type: **not specified**

African Women in Physics Forum

Friday, 23 July 2021 11:00 (25 minutes)

Presenter: Dr CYULINYANA, Marie Chantal (University of Rwanda)

Contribution ID: **553** Type: **not specified**

Parallel session 2: Light Sources

Friday, 30 July 2021 13:15 (1h 15m)

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Light Sources and their Applications

Presenter: Dr D'ALMEIDA , Thierry (X-Tech Labs (Benin))

Contribution ID: **554** Type: **not specified**

Parallel Session 1: Gravitational Waves

Monday, 26 July 2021 10:30 (1 hour)

(Chair : Ketevi Assamagan)

Other

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Light Sources and their Applications

Presenter: Prof. COCCIA, Eugenio (Gran Sasso Science Institute and INFN)

Contribution ID: **555** Type: **not specified**

Parallel Session 2: Statistical Analysis

Monday, 26 July 2021 10:30 (1 hour)

(Chair : Christine Darve)

Other

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Light Sources and their Applications

Presenter: GROSS, Eilam (Weizmann Institute of Science (IL))

Contribution ID: **556** Type: **not specified**

Parallel Session 1: Neutrinos in the 21st Century

Tuesday, 27 July 2021 15:00 (1 hour)

A survey of neutrino oscillations and current and future experiments

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Light Sources and their Applications

Presenter: BISHAI, Mary (Brookhaven National Laboratory)

Contribution ID: **557** Type: **not specified**

Parallel Session 2: Internet of Things

Tuesday, 27 July 2021 10:30 (1 hour)

(Chair : Fernando Ferroni)

Other

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Astrophysics & Cosmology

Light Sources and their Applications

Presenter: RAICH, Uli (retired)

Contribution ID: **558** Type: **not specified**

Parallel Session 1: Flavor Physics

Wednesday, 28 July 2021 10:30 (1 hour)

(Chair : Steve Muanza)

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Particle Physics

Nuclear Physics

Presenter: PEPE-ALTARELLI, Monica (CERN)

Contribution ID: **559** Type: **not specified**

Parallel Session 2: Internet of Things

Wednesday, 28 July 2021 10:30 (1 hour)

(Chair : Christine Darve)

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High Performance Computing

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Light Sources and their Applications

Presenter: RAICH, Uli (retired)

Contribution ID: **560** Type: **not specified**

Parallel Session 1: Neutron Sources as tools for innovation

Thursday, 29 July 2021 10:30 (1 hour)

(Chair : Christine Darve)

Other

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Light Sources and their Applications

Presenter: DARVE, Christine (European Spallation Source)

Contribution ID: **561** Type: **not specified**

Parallel Session 2: Quantun Information

Wednesday, 28 July 2021 16:30 (1 hour)

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Light Sources and their Applications

Presenter: Prof. TELMINI, Mourad (University of Tunis El Manar)

Contribution ID: **562** Type: **not specified**

Plenary Session: Neutron Sources—Thermal neutron detection at ESS

Friday, 30 July 2021 10:30 (1 hour)

(Chair : Christine Darve)

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Light Sources and their Applications

Presenter: KANAKI, Kalliopi (ESS - European Spallation Source (SE))

Contribution ID: **563** Type: **not specified**

Parallel Session 2: Heavy Ion Physics

(Chair : Ketevi Assamagan)

Other

High Performance Computing

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Light Sources and their Applications

Presenter: BUTHELEZI, Edith Zinhle (iThemba LABS, National Research Foundation (ZA))

Contribution ID: **564** Type: **not specified**

The African School of Physics (ASP)

Wednesday, 21 July 2021 10:00 (45 minutes)

Light Sources and their Applications

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Particle Physics

Nuclear Physics

Presenter: ASSAMAGAN, Ketevi Adikle (Brookhaven National Laboratory (US))

Contribution ID: **565** Type: **not specified**

Medical accelerators for radionuclide production and radiation therapy

Wednesday, 21 July 2021 16:30 (1 hour)

Presenter: SILARI, Marco (CERN)

Contribution ID: **566** Type: **not specified**

The International Association of Physics Students (IAPS)

Monday, 19 July 2021 11:00 (25 minutes)

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Nuclear Physics

Presenters: GARCIA, Duarte (IAPS); CHITRE, Ruhi (University of Warwick, United Kingdom & IAPS)

Contribution ID: **567** Type: **Poster Presentation**

POSTER CONTEST

Saturday, 24 July 2021 14:00 (6 hours)

Please submit your poster by Saturday, July 24,
by uploading it to this contribution:

The poster should present your PhD research, with emphasis on its potential to contribute to Africa's transformation.

Instructions:
- The title should be short and catchy.
- The file name shall be FirstLastNames_OneKeyWord.pdf
- The format: .pdf of A0 or slides
- Add your short biography
- Acronyms should be spelled out only the first time they are cited.

You can also drop your poster at : https://drive.google.com/drive/folders/1YSkQxj4HPMn5JH0h6tp1SFge8IgHYQDs?usp=sh

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Contribution ID: **568** Type: **not specified**

Survey

Friday, 30 July 2021 17:30 (10 minutes)

Contribution ID: **569** Type: **not specified**

Certificates of participation and Concluding comments

Friday, 30 July 2021 17:40 (20 minutes)

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