

The African Geophysical Society 2023 Annual Conference, Lusaka, Zambia

Times/Day	Monday October 2
07:30 – 08:15	Registration
	Chair - Dr. Patrick Sibanda - Space Weather
08:15 - 08:15	Welcome Remarks - Dr. C. Ngwira and AGS President/Representative
08:20 – 08:45	Opening Address; Ministry of Technology and Science Representative – Director Jane Chinkusu
08:45 - 09:00	John Bosco Habarulema - Remembering Dr. Lee-Anne McKinnell
09:00 - 09:15	Keynote Speaker: Reinhard Friedel - NASA Heliophysics Space Weather Program
09:15 - 09:30	Rendani Nndanganeni - Overview of South African National Space Agency's new 24/7 Operational Space Weather Capability
09:30 - 09:45	Eshet Tafes – Regional Overview of The African Space Program: Challenges and Prospective Solutions in the Long Run
09:45 - 10:00	Susan Skone - A Near Real-Time Ionospheric Data Assimilation Framework for Space Weather Decision Support
10:00 - 10:15	Antti Pulkkinen - Moved
10:15 - 10:30	Coffee Break
	Chair - Dr. Susan Skone - Observational Studies and Modeling
10:30 - 10:45	Jade Morton - GNSS As Signals-of-Opportunity for Ionosphere, Atmosphere, Ocean Surface, and Land Cover Remote Sensing
10:45 - 11:00	Lindsay Goodwin - Resolving F-region irregularity drivers using multipoint incoherent scatter radar
11:00 - 11:15	Denny Oliveira - Interplanetary shock impact angle control of dB/dt variations induced during substorms: A statistical study
11:15 - 11:30	Banda Yoram - Withdrawn
11:30 - 11:45	EndawokeYizengaw - The Unintended Sources of Radio Frequency Interference on GNSS Signals
11:45 - 12:00	Audu Moses Owoicho - Statistical Analysis and Characterization of the Occurrence of Geomagnetic Storms and its Dependent on Solar Cycle, Season, and Time during Solar Cycles 21 – 24 (Remote)
12:00 - 12:15	Sulungu Emmanuel - Performance of IRI 2016 Model in Predicting Total Electron Content in Comparison with GPS-TEC in Southern Equatorial Ionization Anomaly Crest over East Africa During 2019 – 2021 (withdrawn)
12:15 - 12:30	Vincent Ledvina - The North Dakota Dual Aurora Camera Version 2.0 (NoDDAC2.0), a Platform for Citizen Science and a Testbed for Implementing Best Practices in Open Data and Collaboration
12:30 - 14:00	Lunch
	Chair - Dr. Andrew Akala - Dynamics/Electrodynamics of the Ionosphere
14:00 - 14:15	Zama K. Josephs - Influence of Neutral Wind on Nighttime MSTID Propagation
14:15 - 14:30	Claire Gasque - The Case of the Missing Ionosphere: Investigating the

The African Geophysical Society 2023 Annual Conference, Lusaka, Zambia

	Ionospheric Hole Following the 2022 Tonga Volcanic Eruption
14:30 - 14:45	Anthea Coster - Ionospheric Storms in Solar Cycle 25: Monitoring scintillation and TEC
14:45 - 15:00	Ramazan ATICI - Disturbances in the mid-latitude ionosphere during Severe Geomagnetic Storms
15:00 - 15:15	Chapagain Narayan - Ionospheric Variability Over Nepal Using GPS TEC Measurements
15:30 - 15:45	Jason Derr - Pure Interchange in a Bubble (Remote)
15:45 - 16:00	Coffee Break
	Chair - Dr. Anthea Coster - Solar and Heliosphere 1
16:00 - 16:15	Christopher Ndiitwani - A Simulated Galactic Proton Modulation Studied from Solar Minimum to Maximum Conditions
16:15 - 16:30	Pertti Makela - Sustained Gamma-Ray Emission Events in Solar Cycle 25
16:30 - 16:45	Kostadinka Koleva - Spatial Relationship between CMEs and Prominence Eruptions
16:45 - 17:00	Ramokgaba Innocentia Itumeleng - withdrawn
17:00 - 17:15	Neal Hurlbert - Remote
17:15 - 17:30	Nat Gopalswamy - Impact of Solar Cycle Variation on Space Weather

	Tuesday October 3
	Chair - Dr. Zama K. Josephs - Magnetosphere/Ionosphere/Lower Atmosphere Coupling
08:00 - 08:15	Announcements
08:15 - 08:30	James Roeder - Rapid Variations of Electron Pitch Angle Distributions and Correlated Wave Emissions
08:30 - 08:45	Scott Thaller - The Role of Magnetospheric Dynamics in the Plasmasphere and their role in Driving Middle and low- latitude Ionospheric Effects
08:45 - 09:00	Homayon Aryan - A Statistical Analysis of the Auroral Streamer Current Wedge
09:00 - 09:15	Salinas Hector Angel - Statistical Analysis of Electric Current Structures in the Magnetosheath
09:15 - 09:30	Fredrick Espen - Determining the reliability of OMNI data to Predict Solar Wind Conditions at Earth
09:30 - 09:45	MengitsuTsidu Gizaw - The Westward-propagating Wavenumber 1 Quasi-two-day Oscillation in GPS-derived TEC and its Association with Solar and Geomagnetic Activities
09:45 - 10:00	Mike Heyns - Developing Operational Space Weather Products Using Physics-based Engines
10:00 - 10:15	Chigo Ngwira - Assessment of Geomagnetically Induced Currents - Observations and Modeling

The African Geophysical Society 2023 Annual Conference, Lusaka, Zambia

10:15 - 10:30	Coffee Break
	Chair - Dr. Melessew Nigussie - Machine Learning and Remote Sensing Studies
10:30 - 10:45	Lonesome Malambo - Assessing the Consistency of ICESat-2 Elevations in Cross-over Locations Across Zambia
10:45 - 11:00	Ncube Mduduzi Blessing - Anthropogenic Effects on Atmospheric Pressure
11:00 - 11:15	Daniel Okoh - 3-D modeling of the ionospheric electron density using artificial neural networks(Remote)
11:15 - 11:30	Mutale Chileshe Chryl
11:30 - 11:45	Ayman Mahrous - Machine Learning Approaches for Space Weather: Case Studies of Solar, Magnetospheric and Ionospheric Parameters
11:45 - 12:00	George Shikwambana
12:00 - 12:15	Mwenya Misheck - A Machine Learning Based Whistler Wave Identifier Trained on Synthetic Data
12:15 - 12:30	OmogoloKeobokil - Investigation of the Lake Bangweulu As a Possible Candidate for Meteor Impact
12:30 - 14:00	Lunch
	Chair - Dr. John Bosco Habarulema - Data/Instrumentation, Outreach, and Education
14:00 - 14:15	Shuji Abe -Update on the MAGDAS Project (Remote)
14:15 - 14:30	Patrick Sibanda - Data/instrumentation in Zambia
14:30 - 14:45	Olusegun Jonah - Assessing the Effects of a Minor CIR-HSS Geomagnetic Storm on the Brazilian Low-Latitude Ionosphere
14:45 - 15:00	Paul Baki - Opportunities and Challenges to Space Weather Research in Africa
15:00 - 15:15	Babatunde Rabi u - Present Status of Space Physics Research Infrastructure in Africa (Remote)
15:30 - 15:45	Jive Lubbungu - Storytelling and Narrative Techniques in Science Education and Public Outreach: A Literary Perspective
15:45 - 16:00	Prosperity Simpemba - Science Outreach Programs Under IAU
16:00 - 16:15	Fabiano Rodrigues - Low-Cost Ionospheric Scintillation (Remote)
	Chair - Dr. Chigo Ngwira and Mr. Prosperity Simpemba
17:30 - 20:00	Student Poster Session with light meal/drinks

The African Geophysical Society 2023 Annual Conference, Lusaka, Zambia

	Wednesday October 4	
	Chair - Dr. Rendani Ndanganeni - Low-latitude Ionosphere	
08:00 - 08:15	Announcements	
08:15 - 08:30	Patrick Sibanda - Observations of Scintillation in Zambia	
08:30 - 08:45	Melessew Nigussie - Characterization and Climatological Modeling of Equatorial Ionization Anomaly (EIA) Crest Position	
08:45 - 09:00	Aol Sharon - TBD (Remote)	
09:00 - 09:15	Andrew Akala - Effects of Nonlinear wave Propagation Through the Ionosphere During Nighttime	
09:15 - 09:30	Habarulema John Bosco - Modelling Ionospheric Vertical Drifts Using a Combination of Ground-based and Satellite Data	
09:30 - 09:45	Aderonke Obafaye - TBD (Remote)	
09:45 - 10:00	Keith Groves : SCINDA Update (Remote)	
10:00 - 10:15		
10:15 - 10:30	Coffee Break	
	Chair - Dr. Antti Pulkkinen - Solar and Heliosphere 2	
10:30 - 10:45	Alphonse Sterling - Onset of Large-scale and Small-scale Solar Eruptions	
10:45 - 11:00	Donald Ngoben i- Modelling Cosmic ray Solar Modulation Observed by PAMELA and HEPD01 Detectors in two Successive Solar Minima	
11:00 - 11:15	Sanchita Pal - Global Insight into a Complex-structured Heliosphere based on the Local Multi-point Analysis	
11:15 - 11:30	Mari-Paz Miralles - Coronal Cavity Stability in Pseudostreamers and Helmet Streamers	
11:30 - 11:45	Anshu Kumari Singh -	
11:45 - 12:00	Abby Godson - Unification of Low Luminosity Radio Sources	
12:00 - 12:15	Fred-Joe Nam'bala/Chigo - SID Monitor Data from UNZA	
12:15 - 12:30		
12:30 - 14:00	Lunch	
	Chair - Dr. Olivier Obrou - Miscellaneous Studies	
14:00 - 14:30	Antti Pulkkinen - NASA Goddard Space Flight Center Space Weather Priorities and Activities	
14:30 - 14:45	Olusegun Jonah - Investigating the Surface-Atmosphere Coupling During the Beirut Explosion Event	
14:45 - 15:00	Denny Oliveira - Filling in the Gaps: How the GDC Mission can help with Unravelling the Secrets of Inter-hemispheric Energy Inputs into the Magnetosphere-Ionosphere System	
15:00 - 15:15	Wojciech J. Miloch - Ionospheric Plasma Structuring and Irregularities(Remote)	

The African Geophysical Society 2023 Annual Conference, Lusaka, Zambia

15:15 - 15:30	John Bosco Habarulema - TBD	
15:30 - 15:45		
15:45 - 16:00	Coffee Break	
16:00 - 16:15	Open Discussions and Closing	

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