

The 6th East African Astronomical Society Workshop (EAASW)

“Astronomy for Science and Social Development”

20-22 May 2021, **Open University of Tanzania (OUT)** and **University of Dodoma (UDOM)**, Tanzania

With IAU EA-ROAD Website: <http://earoad.essti.gov.et>

Day 1 (20 May 2021)			
Time (EAT) (GMT+3)	ACTIVITIES	SPEAKERS/PRESENTERS	ZOOM LINKS
9:00 - 10:35 AM	Opening program	Invited Speakers	
CHAIR SAID ALLY			
20'	Welcome Welcoming by LOC and program introduction Welcome addresses from organizers Open University of Tanzania (OUT) University of Dodoma (UDOM) East Africa ROAD Ethiopian Space Science & technology Institute Welcome by EAAS Chair person	LOC-Chair - Noorali T. Jiwaji Vice Chancellor, OUT Vice Chancellor, UDOM Alemiye Mamo , EA-ROAD Abdissa Yilma, General Director ESSTI Paul Baki , Tech Univ of Kenya	https://zoom.us/j/97385219238
9:20 - 9:30 AM	Official Opening Speech Guest of honor (higher official of Tanzania)	TBA(To be Assigned)	
10'	Keynote Address		
9 30	International Astronomical Union (IAU)	Teressa Lago, IAU General Secretary	
9 35	Ethiopia Ministry of Innovation and Technology(MiNT)	Representative from MiNT	
9 40	South Africa Department of Science and Innovation (DSI)	Takalani Nemaungani, DSI	
9 45	Kenya Space Agency(KSA)	Major General (Rtd) Thomas Chepkuto, CEO KSA	
9 50	African Union (AU)	Tidiane Outtare, AUC	
9 55	African Astronomical Society(AfAS)	Jamal Mimouni, AfAS President	
15'	Message from Supporters & Collaborators with key contributions in development of Astronomy in East Africa		
10 00	Development in Africa with Radio Astronomy(DARA)	Melvin Hoare, Leader DARA	
10 05	Office of Astronomy for Development (OAD)	Kevin Govender, OAD Director	
10 10	International Science Program (ISP)	Carla Puglia/Ernst Van Groningen, ISP Director	
30'	Messages from African & International Institution supporting Astronomy		
10 15	European Astronomical Society (EAS)	Inma Dominguez, EAS Secretary	
10 20	The African-European Radio Astronomy Platform (AERAP)	Declan Kirrane, Initiator, AERAP	
10 25	South African Astronomical Observatory (SAAO)	Petri Vaisanen, SAAO Director	
5'	Glimpse of EAAS Foundation		
10 30	Short Talk about EAAS foundation	Edward Guinan , EAAS Founder	
5'	Adjustment Period for next session		
CHAIR STANLEY MWANGA			
10:35-11:50AM	Plenary Invited Talk		
40'	Astronomy for Science & Socioeconomic Development		
10 35	Invited Talk -I - Astronomy for Development	Vanessa McBride (OAD, SAAO), South Africa	
10 55	Invited Talk -II - The Promise of RadioAstronomy	Ciro Pappalardo,PACE, Portugal	
11 15 (30')	Discussion		
5'	Adjustment Period for next session		
Scientific Session I : Scientific Research on Astronomy Astrophysics			
11:50 - 12:45 AM	Plenary Invited Talk		
40'	Planetary Astronomy: Solar system , Near Earth objects and Extra-solar system		
11 50	Invited Talk -I- Stellar activity an important ingredient for planet habitability: the case of M stars	Priscilla Muheki , MUST, Uganda	
12 10	Invited Talk -II - Hunting Shadows - for Capacity Building	Katrien Kolenberg, AFIPS, Belgium	
15'	Discussion		
12:45-1:30 PM	Lunch Break		

Day 1 Afternoon : Scientific Session I -Continued		
CHAIR	MIRJANA POVIC	CHAIR PHENEAS NKUNDABAKURA
1:30 -3:45 PM	Parallel Sessstion I (astrobiology, protoplanetary systems and star formation)	Parallel Sessstion II (stellar astronomy)
01 30	Exploring the Biochemical Character of Galactic Ecosystems', William H. Waller ,The Galactic Inquirer, USA	Testing stellar evolution of models Algol-type Eclipsing binaries' Seblu H. Negu, ESSTI, Ethiopia
01 45	Evolutionary Panspermia: Planets Micro-Life and Beyond', Egbuim Timothy Chukwudi, NASRDA, Nigeria	Rotational Velocity of Metal-Poor K-giant Stars inthe Milky Way', Ukesh Karki, Tri-Chandra Multiple Campus, Nepal
02 00	Time-domain Astronomy: Monitoring Masers', Gordon MacLeod, UWO, Canada	A Comparative Study Of Dust Color Temperature, Planck's Function, Dust Mass And Extinction Around Agb Star Using Iris And Akari Survey', Pramila Magar, Amrit Campus, Nepal
02 15	Multi-wavelength Observations of the Massive Protocluster G188.95+0.89 Periodic Maser Source', M. M. Mutie, TU-K, Kenya	'A Study Of Dust Properties Around C-Rich Agb Star-Iras 04427+4951 Using Iris And Akari Survey', Trishna Subedi, Amrit Campus, Nepal
02 30	Low mass to Intermediate-mass star-forming Hydrostatic Cores in Self-gravitating Molecular Cloud', Gemechu Muleta, ESSTI, Ethiopia	A Study Of The Variation Of Dust Color Temperature, Planck's Function, Dust Mass And Extinction Around Psr J1240-4124', Ashok Chaudhary,Amrit Campus, Nepal
02 45	A multi-epoch study of radio continuum emission from massive protostars', W. O., Obonyo, TU-K, Kenya	Effect Metalicity on pulsation of redgiants stars in Kepler's clusters', Abush Mengiste, MUST, Uganda
03 00		High-resolution Spectroscopy of 'hump and spike stars', Otto Trust, MUST, Uganda
03 15		Generalized compact star models with conformal symmetry', Jonas W Jape, UDOM, Tanzania
5'	Adjustment Period for next session	
CHAIR	PAUL BAKI	
3:35-4:10 PM	Plenary Invited Talk	
20'	Stellar Astronomy & Astrophysics	
	Invited Talk -II - Under African Skies: Betelgeuse and Southern Variable Red Supergiants - Progenitors of Bright Core Collapse Supernovae	Edward Guinan , Villanova Univ.USA
03 35	Discussion	
10'		
5'	Adjustment Period for next session	
Special Session I: Women in Science		
4:10-5:40 PM	Women in Science	
30'	Presentation/experience sharing by women Scientist	
4 10	AfNWA presentation	TBD
4 15	SARAO/DARA report on Gender Balance	TBD
4 20	Supernova initiative	TBD
4 25	Astronomy in color	TBD
4 30	AERAP women in science group	TBD
4 35	2min video presentations about initiatives across the continent	TBD
4 40 (60')	Panel Discussion	All participants
5 40 (20')	1st DAY'S OVERALL DISCUSSIONS	
6:00 PM End of Day I		

Parallel Session I

<https://zoom.us/j/97385219238>

Parallel Session II

<https://zoom.us/j/97992359910>

<https://zoom.us/j/97385219238>

Day 2 Morning (21 May 2021)

Scientific Session I : Scientific Research on Astronomy Astrophysics

CHAIR **GUINAN, EDWARD /Vanessa McBride**

9:00- 10:00 AM	Plenary Invited Talk		
40'	Galactic and Extra Galactic Astronomy		https://zoom.us/j/97385219238
9 00	Invited Talk -I - On the properties of galaxies and high energy emission from AGN	Pheneas Nkundabakura, UOR, Rwanda	
9 20	Invited Talk -II - Addressing from East-Africa the challenges in the research frontiers of active galaxies	Mirjana Povic, ESSTI, Ethiopia	
9 40 (15')	Discussion		
5'	Health Break		

10:00 -12:00 AM Scientific Sesssion I CONTINUED

Chair **Carolina Odman-Govender**

CHAIR **EDWARD JURUA**

15' each with Q&A	Parallel Sesssion I (extragalactic astronomy)	Parallel Sesssion II (cosmology and (astro)particle physics)	Parallel Session I
10 00	Using Archival data to find two ionised bubbles at the epoch of reionisation', José Miguel Rodriguez Espinosa, IAC, Spain	The Neutrino Universe', Jamal Mimouni , UPMC1, Algeria	https://zoom.us/j/97385219238
10 15	'Variability of Quasars', Jerusalem Tamirat , ESSTI, Ethiopia	Scalar perturbations in f (T) gravity using the 1 + 3 covariant approach', Shambel Sahlu, ESSTI, Ethiopia	
10 20	Multiwavelength morphological study of ultra-hard active galaxies', Betelehem Bilata, ESSTI, Ethiopia	Multi-fluid Cosmology in Scalar-tensor theory', Joseph Ntahompagaze, , UOR, Rwanda	Parallel Session II
10 25	Multi-Frequency and Resolution Study of the LIRG Seyfert Galaxy NGC1068', Isaac Mutie, TU-K, Kenya	'Nature Of The Gravity'', Thomas Robert Marc , UDOM, Tanzania	
10 30	Detailed Characterisation of LINERs and Retired galaxies in the local universe', Daudi Mazengo, UDOM, Tanzania	'Embedding with generalized measure of anisotropy', ALBERTO K. MATHIAS, UDOM, Tanzania	
10 35	Spatial Orientations of Angular Momentum Vectors of Galaxies in Supercluster S [227+006+0078] and Substructures', Janak Ratna Malla , Institute of Astro-particle Physics, Nepal	'Generalised charged anisotropic quark star models', ABDULRAHIM T ABDALLA, UDOM, Tanzania	
10 40	'Ultra high energy cosmic rays from gamma ray sources', Rahima Doghmane		https://zoom.us/j/97992359910
5'	Adjustment Period for next session		

CHAIR **JEFTA SUNZU**

11:00-12:00	POSTER PRESENTATIONS		
5' each	SESSION 1 POSTERS		https://zoom.us/j/97385219238
11 00	'Statistical Analysis of Low-mass X-ray Binaries', Feven Markos Hunde and Dr. Seblu Humne Negu, ESSTI, Ethiopia		
11 05	'Angular Momentum evolution of Contact binaries', Seblu Humne, ESSTI, Ethiopia		
11 10	'Effects of St. Patrick's Day solar storm on ionospheric TEC and its predictability over entire African region Jean de Dieu NIBIGIRA, K. L. U, India		
11 15	'Space Exploration with human-robotic missions', Shoubhik Pal , Kurukshetra University, India		
11 20	'Simulation of Cosmic Ray Muon Charge Ratio up to 10 TeV using EPOS LHC Model', Mavyline Motari, Kenyatta University, Kenya		
11 25	'Design of software to control and monitor the movement of 20m radio telescope', Jael Rojas, INAOE- Mexico		
11 30	Non-thermal radio emission fr dark matter annihilation processes in simulated Coma like galaxy clusters', Fitsum Woldegerima Beyene, INAOE, Mexico		
11 35	Ionospheric and Magnetic Signatures of a Space Weather Event 25–29 August 2018: CME and HSSWs', Waqar Younas , Quaid-i-Azam University, Pakistan		
11 40	'Distant Apparent Motion Effect', Allen Mhagama, UDOM, Tanzania		
11 45 (15')	SESSION 1 POSTER DISCUSSIONS		
5'	Adjustment Period for next session		
12:05-12:35 AM	Plenary Invited Talk		
20'	Cosmology and High energy astrophysics		
12 05	Invited Talk -I -Black Hole Cinema: Building a next-generation Event Horizon Telescope	Sheperd Doleman, Harvard University and Even Horizon Telescope, USA	
10'	Discussion		
12:35-1:30 PM	Lunch Break		

Afternoon Day 2 : Session 2 :Astronomy Education & Development			
CHAIR		EMMANUEL KIGADYE	
1:30-2:30 PM	Plenary Invited Talk		
40'	Astronomy Education		
01 30	Invited Talk -I - Education, Development, Language, Decolonisation	Carolina Odman-Govender, UWC, SA	https://zoom.us/j/97385219238
01 50 0210 (15')	Invited Talk -II -The IAU Office of Astronomy for Education Discussion	Markus Possel - IAU-OAE, Germany	
5'	Adjustment Period for next session		
CHAIR		EMMANUEL KIGADYE	
CHAIR		EMMANUEL SULUNGU	
2:30 - 3:45 PM	Paper Presentation on Astronomy Education		
15'each with Q&A	Parallel Sesion I	Parallel Sesion II	Parallel Session I
2 30	'Astronomy Textbook's Course Outline of High Schools for Least Developed Countries', Nebiyu Suleyman, ESSS, Ethiopia	'Status Of Stem Initiatives At The University Of Dodoma For Enhancing Stem Career', Gloriaana J. Monko, UDOM, Tanzania	https://zoom.us/j/97385219238
02 45	Being an Astropreneur: Future Trends of Interdisciplinary Approaches on Astronomy Education and Outreach', Exodus Chun-Long Sit, IAU-NEC, Hong Kong	Survey of Teaching, Learning and Assessment Approaches of Astronomy in Primary and Secondary School in Tanzania', Allen Mhagama, UDOM, Tanzania	
03 00	Astronomy as a tool for human capacity development: the Namibian example', Hannah Dagleish, Namibia Univ. Namibia	'Introducing Astronomy training among primary and secondary teachers in Tanzania through NASE Trainings and OAS telescopes, Kiriba Deodatus Stanle, ASSAT, Tanzania	Parallel Session II
03 15	Astronomy development in Sudan challenges and opportunities', Mohd Najee, ISRA, Sudan	Names for planets and astronomical items in Swahili Textbooks, Ingo Koll, ASSAT, Tanzania	https://zoom.us/j/97992359910
03 30	University of Dodoma-The Emerging Space Science and Astronomy Hub in Tanzania', Emmanuel D. Sulungu , USOM, Tanzania		
5'	Adjustment Period for next session		
POSTER PRESENTATIONS			
SESSION 2 POSTERS			
03 35	'Cosmic Water Hole', Advait Arvind Joshi, Fergusson College, India		https://zoom.us/j/97385219238
03 40	'A Comparative Study of The Development of Radio Astronomy in South Africa And Kenya', Carringtone Kinyanjui, Tech.Uni.Kenya,Kenya		
03 45	'Awareness of the Interdisciplinarity of Astronomy for Young Researchers in Tanzania', Daudi Thadei Mazengo, DMOU, Tanzania		
03 50 (5')	SESSION 2 POSTER DISCUSSIONS		
5'	Adjustment Period for next session		
Session 3 :Astronomy communication and Outreach			
CHAIR		ALEMIYE MAMO	
04:00-05:00 PM	Plenary Invited Talk		
40'	Astronomy Communication & Outreach		
04 00	Invited Talk -I -The IAU Office for Astronomy Outreach: Access, Communication, and International Cooperation	Lina Canas , IAU-OAO	https://zoom.us/j/97385219238
04 20	Invited Talk -II - Astronomy outreach and communication – an effective and ethical practice	Niruj Mohan Ramanujam, AFAS	
04 40 (15')	Discussion		
5'	Adjustment Period for next session		
Session 4 :Astro-Tourism Dark Sky Cultural Astronomy and Heritages			
05:00-06:00 PM	Plenary Invited Talk		
40'	Astro-tourism & Dark Sky		
05 00	Invited Talk -I - Astrotourism in East Africa - A Star Safari Experience	Susan Murabana, Traveling Telescope, Kenya	https://zoom.us/j/97385219238
05 20	Invited Talk -II - Dark Skies Oases and Astro-Tourism around the World	Antonia Varela, John Barenting, Pedro Sanhueza, John Hearnshaw and Connie Walker ,NSF's NOIRLab, USA	
05 40 (15')	Discussion		
5'	Preparation/Adjustment Period for next session		
CHAIR		ALEMIYE MAMO	
CHAIR		SAID ALLY	
6:00-7:00 PM	Paper presentations on Astronomy Communications, Asto-Tourism & Dark Sky		
15'each with Q&A	Parallel Sesion I	Parallel Sesion II	Parallel Session I
06 00	'AstroZoom: Adventures in Virtual Outreach', Reza AmirArjomand, Orange County Astronomers, USA	'Effective use of the local geology for the popularization of planetary geology and astronomy; and promoting of astro-geo tourism', Sonit Santosh Sisolekar, India	https://zoom.us/j/97385219238
06 15	'Making Astronomy Accessible and Includible for the Disabilities in Africa', Nebiyu Suleyman, ESSS, Ethiopia	Architectural considerations for planetariums and science museum in Tanzania, Catherine Solomon Meena, Ardhi University,Tanzania	
06 30	'Astronomy Communication in common public - A Study', Somenath Chatterjee, SDMT , India	Indigenous astronomy in Ethiopia, Getinet Feleke, Kotebe Metropolitan University, Ethiopia	https://zoom.us/j/97992359910
06 45	'Macho angani: Astronomy information in Swahili by radio', Ingo Koll, ASSAT, Tanzania	Astronomical activities Program in Sudan, Mohammed Yahya Alradi Eldaw, ISRA, Sudan	
7:00 PM End of Day 2			

Day 3 Morning (22 May 2021)

Session 5 : Development of Astronomy and its Economical contribution in the region

CHAIR PHEANEAS NKUNDABAKURA

9:00- 10:00 AM	Plenary Invited Talk		
40'	Astronomy for development & Economical Contribution		
09 00	Invited Talk -I - The Business of Astronomy – Maximising Economic Impact	Gordon Macleod, Open Univ of Tanzania and Univ Western Ontario,Canada	https://zoom.us/j/97385219238
09 20	Invited Talk -II - Astronomy for science and socioeconomic development	Solomon Belay-Tessema, MiNT/ESSTI	
09 40 (15)	Discussion		
5'	Preparation/Adjustment Period for next session		
10:00 -11:00 AM	Paper Presentation on Economical contribution of Astronomy		
10 00	Progressing Astronomy In Tanzania', Noorali T. Jiwaji, OUT, Tanzania		
10 15	'Big Science for National and Regional Unity', Nadir Omar Hashim, Kenyatta University, Kenya		
10 30	'Applied Computational Tools and Techniques in Astrophysics Data Reduction: Comparative Analysis of Software Packages based on Signals Wavelength', Said Ally, OUT, Tanzania		
10 45	'Techniques for Big Data Storage using Cloud Computing', Said Ally		
5'	Health Break		

Special Session II : Panel Discussion on Challenges & Opportunities of Astronomy Development In the region

CHAIR NOORALI JIWAJI

11:00-11:30 AM	Presentation/Expericance sharing of Panelist on the topic		
	Presentation 1	Alemiye Mamo, EA-ROAD	https://zoom.us/j/97385219238
	Presentation 2	Kevin Govender, OAD	
	Presentation 3	Mirjana Povic, ESSTI	
	Panel Discussion with Panelist	All panelist	
11:30-12:30 AM	Official Closing Speech		
12:30-12:40 AM	Guest of honor (higher official of Tanzania)	TBA(To be Assigned)	
12:30-1:30 PM	Lunch Break		
Afternoon	Bussiness Session of EAAS		
1:30-2:00 PM	EAAS status & Report	EAAS Chair	Link will be provided to the ESSA Members only
2:00- 3:00 PM	Discussion on matter rased from the report	All EAAS members	
3:00-4:00 PM	Future Strategy of EAAS & AOB	EAAS Executives	
4:00 -5:00 PM	Dicission and Conclusion of Bussines Session	All EAAS members	
17:00	END of EAASW workshop		