



## DIGITAfrica Inaugural Workshop Agenda

Date: 24 April 2025

Venue: Protea Hotel Cape Town Waterfront, Breakwater Lodge, Conference Centre (UCT GSB Campus)

Directions: <https://q.co/kqs/B2rT7Nc>

Time: 09:00 - 17:30

Online Access: [Join here](#)

Meeting ID: 327 174 938 076 8

Passcode: NE3dx7XM

Time	Session	Details	Speakers	Session Moderator
09:00 - 09:30	Welcome and Opening Keynote	<ul style="list-style-type: none"><li>- The strategic importance of DIGITAfrica in EU-Africa collaboration in Digital Sciences and Research Infrastructures (RI).</li><li>- Overview of workshop objectives and expected outcomes for DigitAfrica.</li></ul>	<ul style="list-style-type: none"><li>• <b>Prof Serge Fdida</b> (<i>Sorbonne University, France</i>)</li><li>• <b>Prof Joyce Mwangama</b> (<i>University of Cape Town, South Africa</i>)</li></ul>	-
09:30 - 10:45	Session 1: Research Agendas and Technical Frameworks	<b>Presentations</b>  Current landscape of African RIs (e.g., STISA-2024)  <ul style="list-style-type: none"><li>- Local stakeholders speeches (Academia, Industry, Government):</li></ul>	<b>Keynote: Mandry Ntshani</b> ( <i>Department of Science, Technology and Innovation, South Africa</i> )  <b>Talk title:</b> “The role of Investment in research infrastructures for the digital sciences in the context of AU-EU collaboration”	<b>Prof Joyce Mwangama</b> ( <i>University of Cape Town, South Africa</i> )

Time	Session	Details	Speakers	Session Moderator
			<ul style="list-style-type: none"> <li>• <b>Dr Scott Timcke</b> (<i>Research ICT Africa, South Africa</i>)  <b>Talk title:</b> “Data governance for data science: Where Africa has the advantage”</li> <li>• <b>Dr Eliud Musotsi</b> (<i>Research Grants National Research Fund, Kenya</i>)  <b>Talk Title:</b> “TBC”</li> </ul>	
10:45 - 11:00	<b>Coffee Break</b>			
11:00 - 12:00	Session 2: Building the DIGITAfrica Network	<b>Presentations</b> <ul style="list-style-type: none"> <li>- expanding partnerships and establishing regional expertise communities</li> <li>- Mapping roles of academia, industry, and policymakers in the network</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Dr Partson Chikudza</b> (<i>Research Council of Zimbabwe</i>)  <b>Talk Title:</b> “Mapping roles of academia, industry, and policymakers in the network”</li> <li>• <b>Dr Michelle Smith</b> (<i>IRCAD Africa, Rwanda</i>)  <b>Talk Title:</b> “Creating Healthcare Pathways through the African Desert”</li> </ul>	<b>Dr Bessie Malila</b> ( <i>University of Cape Town, South Africa</i> )

Time	Session	Details	Speakers	Session Moderator
			<ul style="list-style-type: none"> <li>• <b>Mark Johnson</b> (<i>Square Kilometer Array, South Africa</i>)</li> </ul> <p>Talk Title: "TBC"</p>	
12:00 - 13:00	Session 3: Identifying Common Research Priorities	<p><b>Panel</b></p> <p>Identifying common research priorities and technical specifications for a pan-African RI</p>	<ul style="list-style-type: none"> <li>• <b>Dr Mitch Cox</b> (<i>University of Witwatersrand, South Africa</i>)</li> <li>• <b>Prof Thomas Magedanz</b> (<i>Technische Universität Berlin, Germany</i>)</li> <li>• <b>Dr Cherif Ghazel</b> (<i>University of Manouba, Tunisia</i>)</li> <li>• <b>Mlamli Boo</b> (<i>University of Johannesburg, South Africa</i>)</li> <li>• <b>Prof Cheikh Ahmadou Bamba Gueye</b> (<i>Université Cheikh Anta Diop de Dakar, Senegal</i>)</li> <li>• <b>Dr Hlabishi Kobo</b> (<i>Council for Scientific and Industrial Research, South Africa</i>)</li> <li>• <b>Prof Mthulisi Velempini</b> (<i>University of Limpopo, South Africa</i>)</li> </ul>	<b>Prof Serge Fdida</b> ( <i>Sorbonne University, France</i> )

Time	Session	Details	Speakers	Session Moderator
13:00 - 14:00	Lunch			
14:00 - 15:00	Session 4: Capacity Building in Digital Sciences	<p><b>Presentations</b></p> <p>Designing education and training pathways: <i>SLICES-RI and SoBigData Academies</i></p> <ul style="list-style-type: none"> <li>- Presentations of the SLICES-RI Academy and SoBigData Academy</li> </ul> <p>Developing the DIGITAfrica Academy and tailoring capacity-building efforts to African needs</p> <ul style="list-style-type: none"> <li>- Local speakers about challenges in education in Africa (needs and gaps)</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Prof Ahmed Biyabani</b> (<i>Carnegie Mellon University Africa, Rwanda</i>)</li> </ul> <p><b>Talk title:</b> “Building digital capacity in African higher education - a view from Rwanda”</p> <ul style="list-style-type: none"> <li>• <b>Dr Winston Ojenge</b> (<i>Africa Centre for Technology Studies, Kenya</i>)</li> </ul> <p><b>Talk title:</b> “Embedded Challenges in Capacity Building of Digital Sciences and Technologies in Africa and How to Address them”</p> <ul style="list-style-type: none"> <li>• <b>Emmanuel Rashayi</b> (<i>University of Zimbabwe, Zimbabwe</i>)</li> </ul> <p><b>Talk title:</b> Title: “Strengthening Digital Education Capacity in African Universities and TVETs: Gaps, Needs, and Opportunities”</p> <ul style="list-style-type: none"> <li>• <b>Michela Natilli</b> (<i>National Research Council of Italy, Italy</i>)</li> </ul>	<b>Dr Vitalis Ozianyi</b> ( <i>Strathmore University, Kenya</i> )

Time	Session	Details	Speakers	Session Moderator
			<p><b>Talk title:</b> “A new generation of data scientists: the SoBigData Academy”</p> <ul style="list-style-type: none"> <li>• <b>Stavroula Maglavera</b> (<i>University of Thessaly, Greece</i>)</li> </ul> <p><b>Talk title:</b> “SLICES Academy”</p>	
15:00 - 16:00	Session 5: Economic Dimensions and Sustainability	<p><b>Panel</b></p> <ul style="list-style-type: none"> <li>- Investment strategies, funding opportunities, and socio-economic impacts of a pan-African RI</li> <li>- Crafting a sustainable path for DIGITAfrica, including financial and governance models. (Panelists from partners + regional stakeholders)</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Dr Charley Lewis</b> (<i>Independent Communications Authority of South Africa, South Africa</i>)</li> <li>• <b>Dr Mmaki Jantjies</b> (<i>Telkom Group, South Africa</i>)</li> <li>• <b>Sabelo Dlamini</b> (<i>South African National Research Network, South Africa</i>)</li> <li>• <b>Mark Johnson</b> (<i>Square Kilometre Array, South Africa</i>)</li> <li>• <b>Prof Vincent Omwenga</b> (<i>Strathmore University, Kenya</i>)</li> <li>• <b>Dumisa Ngwenya</b> (<i>SENTECH SOC, South Africa</i>)</li> <li>• <b>Phila Sithole</b> (<i>Association for Comms and Technology, South Africa</i>)</li> </ul>	<b>Prof Albert Lysko</b> ( <i>Council for Scientific and Industrial Research, South Africa</i> )

Time	Session	Details	Speakers	Session Moderator
16:00 - 16:15	<b>Coffee Break</b>			
16:15 - 17:00	Session 6: Blueprint and Proof of Concept	<b>Presentations</b> <ul style="list-style-type: none"> <li>- Demonstration of potential technical tools and platforms:</li> <li>- Defining the Blueprint / collaborative platform for EU-Africa joint research and education activities)</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Dr Damien Saucez</b> (<i>French Institute for Research in Computer Science and Automation, France</i>)</li> <li>• <b>Dr Nikos Makris</b> (<i>University of Thessaly, Greece</i>)</li> </ul> <p><b>Title:</b> “Running 5G networks from your home with SLICES-RI: Hardware and software hands-on”</p>	-
17:00 - 17:30	Finalization and Action Plan	<b>Closing</b> <ul style="list-style-type: none"> <li>- Summary of workshop discussions and key results</li> <li>- Closing Remarks: Reflections from participants and organizers</li> <li>- Next steps and timeline for implementation</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Prof Joyce Mwangama</b> (<i>University of Cape Town, South Africa</i>)</li> <li>• <b>Prof Serge Fdida</b> (<i>Sorbonne University, France</i>)</li> </ul>	-

# Speaker Biographies

## Session 1: Research Agendas and Technical Frameworks

**Mandry Ntshani** (*Department of Science, Technology and Innovation, South Africa*)



Ms. Mandry Ntshani is the Director responsible for Africa Multilateral Cooperation at the Department of Science, Technology and Innovation (DSTI) in South Africa. A position she holds since October 2022. Ms Ntshani was previously the Assistant Director for Europe Bilateral Relations within the International Trade and Economic Development Division at the Department of Trade, Industry and Competition (2012-2015) and the Deputy Director for Africa Multilateral Cooperation (2015-2022) in the DSTI. Ms Ntshani is experienced in science diplomacy, policy development and implementation. Ms Ntshani is currently responsible for managing Africa Science, Technology and Innovation multilateral engagements through strategic partnerships and to promote South Africa's national interests for achieving shared economic and social development in international, continental as well as regional platforms. Ms Ntshani served in the Task Team that was responsible for drafting the Decadal Plan Technology and Innovation (STI). She also serves in various Working Groups to support regional integration.

**Dr Scott Timcke** (*Research ICT Africa, South Africa*)



Scott Timcke (PhD, Simon Fraser University) is a Senior Research Associate at Research ICT Africa where he oversees the Information Integrity programme. He is also Affiliated with the Center for Information, Technology, and Public Life at the University of North Carolina at Chapel Hill. His third book, *The Political Economy of Fortune and Misfortune: Prospects for Prosperity in Our Times*, was released in March 2023

**Dr Eliud Musotsi** (*Research Grants National Research Fund, Kenya*)



Dr Eliud Musotsi is an accomplished linguist, researcher, and grants management professional with extensive experience in academia and public service. He currently serves as the Acting Deputy Director of Research Grants at the National Research Fund-Kenya (NRF), where he has played a pivotal role in facilitating research funding, resource mobilization, and policy implementation in the fields of science, technology, and innovation (STI). Dr. Musotsi holds a Ph.D. in Linguistics and Cultural Studies from Masinde Muliro University of Science and Technology, an M.A. in Linguistics and Literature from Kenyatta University, and a Bachelor of Education (Hons.) from the same institution. His expertise encompasses grant writing, research project management, and higher education administration, with a proven track record of securing and managing multimillion shilling research funds. Beyond his professional responsibilities, Dr. Musotsi is a passionate researcher who has authored multiple publications in linguistics and research excellence. He has participated in numerous high-level conferences, workshops, and policy discussions, both locally and internationally. His leadership extends beyond research grants, as he has served on various national committees, steering groups, and advisory boards, contributing significantly to the advancement of education, research, and innovation policy in Kenya.

**Session Moderator:**

**Prof Joyce Mwangama** (*University of Cape Town, South Africa*)



Joyce Mwangama holds the position of an associate professor and researcher in the Department of Electrical Engineering at the University of Cape Town (UCT), in Cape Town, South Africa. She obtained her PhD and MSc in Electrical Engineering, along with a BSc in Electrical and Computer Engineering, all from the University of Cape Town. Her prominent research interests centre on communication networks, next-generation networks, and digital health, where she leads efforts in setting up experimental next-generation mobile testbeds. Additionally, Joyce provides her expertise and guidance to the Independent Communications Authority of South Africa 5G Forum, contributing to the research and development of 5G/6G technologies.





## Session 2: Building the DIGITAfrica Network

**Dr Partson Chikudza** (*Research Council of Zimbabwe*)



Dr. Partson Chikudza serves as the Executive Director of the Research Council of Zimbabwe (RCZ), where he is instrumental in propelling scientific research and innovation. With a strong background in research policy and management, he focuses on fulfilling the RCZ's mandate through crafting the RCZ's strategic plan and managing resource allocation to align with national priorities. He oversees scientific research initiatives within public institutions, ensuring their contributions toward Zimbabwe's development goals. Dr. Chikudza holds a PhD in Social Sciences Development Studies from the University of Fort Hare in South Africa, a Master of Arts in Development Studies from Midlands State University in Zimbabwe, a Bachelor of Arts in Public Administration and Development Studies from the University of South Africa, a Diploma in Education from the University of Zimbabwe, and an Executive Certificate in Project Management from the University of Zimbabwe.

**Dr Michelle Smith** (*IRCAD Africa, Rwanda*)



Dr. Michelle K. Smith, MD, FACS, is a distinguished surgeon and medical leader with extensive expertise in minimally invasive, robotic, endocrine, digestive and bariatric surgery as well as gastrointestinal endoscopy techniques. Currently serving as the Acting CEO and Medical Surgical Director at IRCAD Africa in Kigali, Rwanda since February 2024, she previously held a visiting fellowship at IRCAD France in Strasbourg. With a career spanning over two decades, Dr. Smith has held prominent roles including Consultant Surgeon and Deputy Chief of Surgery at Beijing United Family Hospital (2017-2023), Section Chief of General Surgery at South Texas VAHCS in San Antonio (2014-2017), and Director of Minimally Invasive and Bariatric Surgery at VA Healthcare System in San Diego (2003-2008). She is an Associate Professor of Clinical Surgery, having taught at the University of Texas Health Science Center San Antonio and UC San Diego. Dr. Smith's specialties include advanced minimally invasive and robotic surgery, endoscopic techniques, foregut surgery, and obesity treatment. She earned her MD from the Medical College of Virginia and completed fellowships at Cornell University and the European Institute of TeleSurgery in Strasbourg. Board-certified by the American Board of Surgery, she holds active medical licenses in California and Texas. Her current focus is on surgical training and AI implementation into healthcare in Africa



**Mark Johnson** (*Square Kilometre Array, South Africa*)



Mr. Mark Johnson is passionate about technology transfer and all elements associated therewith. He has more than 15 years' experience in the field, having executed the roles in the public sector both as a fund manager & a technology transfer specialist in the areas of chemistry, biotechnology, and more recently astronomy. Since joining SARAO in November 2018 he has been instrumental in growing the technology transfer portfolio and has been

**Session Moderator: Dr Bessie Malila** (*University of Cape Town, South Africa*)



Bessie Malila is a Research Fellow in the Division of Biomedical Engineering at the University of Cape Town. She completed the BSc degree in electrical/electronic engineering at the University of Zimbabwe and the MSc and PhD in Telecommunications Engineering at the University of Cape Town; and held a postdoctoral research fellowship in Biomedical Engineering at the same from 2017 to 2020. She has several years' experience in the telecommunication industry and research in Digital Health. Her research interests include leveraging mobile technologies to improve the delivery of healthcare services through 5G mobile technologies, Artificial Intelligence, Machine Learning, Blockchain, Augmented Reality, Telehaptics and Internet of Medical Things. She is currently developing a secure digital health testbed for evaluation and validation of existing and emerging Telemedicine and mHealth services and applications. She is also investigating the concepts of smart hospitals, and virtual clinics and how these can help improve healthcare coverage in remote and rural communities. She has recently established the Telemedicine and Connected Care research group which will focus on developing and evaluating Telemedicine, Telehealth, mHealth and other digital health applications.

### Session 3: Panel Identifying Common Research Priorities

**Dr Mitch Cox** (*University of Witwatersrand, South Africa*)



Mitchell A. Cox received his PhD in Electrical Engineering in 2020, focusing on Structured Light in Turbulence. He co-founded the Wits OC Lab, where he applies his expertise in structured light and his proudly embraced "nerdy engineer" skills to pioneer solutions for long-range, low-cost free-space optical communications. These solutions often involve the creative use of low-cost components—often in ways not originally intended by their manufacturers—and the application of machine learning, evolving into optical neuromorphic computing, to advance low-cost FSO technologies. Dr. Cox was honored with the 2024 Meiring Naudé Medal from the Royal Society of South Africa, the 2023 Friedel Sellschop Award, and holds positions as an Optica Ambassador and a Senior Member of the IEEE. With his wide-ranging and deep interests, Dr. Cox is committed to using his research to help bridge the digital divide. He aims to make high-speed internet access available globally, beginning with his home in South Africa—tipping his hat to the hardworking taxpayers who keep the lasers on.

**Prof Thomas Magedanz** (*Technische Universität Berlin, Germany*)



Thomas Magedanz (PhD) has been professor at the Technische Universität Berlin, Germany, leading the chair for next generation networks since 2004. In addition, since 2003 he has been Director of the Business Unit Software-based Networks (NGNI) at the Fraunhofer Institute for Open Communication Systems FOKUS in Berlin. For 35 years Prof. Magedanz has been a globally recognized ICT expert, working in the convergence field of telecommunications, Internet and information technologies understanding both the technology domains and the international market demands. His interest is in software-based networks for different vertical industries, with a strong focus on building public and non-public campus networks. He became famous over the last two decades for the development of open software toolkits for building vendor independent open testbeds for next generation mobile networks, such as OpenIMSCore, OpenEPC, OpenMTC, OpenBaton, Open5GCore. His current interest is in the evolution from 5G to 6G and the development of the Organic 6G Core. For more details of his current work look here: [www.6G-ready.org](http://www.6G-ready.org) and [www.open6Gnet.org](http://www.open6Gnet.org)



**Dr Cherif Ghazel** (*University of Manouba, Tunisia*)



Dr. Cherif Ghazel is an Associate Professor and researcher at the National School of Computer Sciences (ENSI), University of Manouba, Tunisia. He holds both a Specialized Engineering Master's degree and a Research Master's degree in Telecommunications from the Higher School of Telecommunications Engineering (Sup'Com-Tunis), University of Carthage. He earned his Ph.D. and Habilitation (HDR) in Computer Science and Engineering from ENSI. His research interests include Cloud Computing, Network QoS, and Security. His work has been widely published in international journals, conferences, and academic books. Beyond his academic role, Dr. Ghazel has held senior leadership positions in public administration, where he managed numerous IT and telecommunications initiatives. His responsibilities included the supervision of technical projects and strategic coordination of virtual education and digital training programs. He has also participated in a number of international projects and development collaborations in computer science, networking, and communication systems. Dr. Ghazel's teaching and technical expertise spans fixed, mobile, and wireless telecommunications, as well as computer networks and cybersecurity. He holds numerous professional certifications in key technical areas, including Linux, Information Systems, Geomatics, Cisco Technologies, and Cyber and Infrastructure Security.

**Mlamli Booi** (*University of Johannesburg, South Africa*)



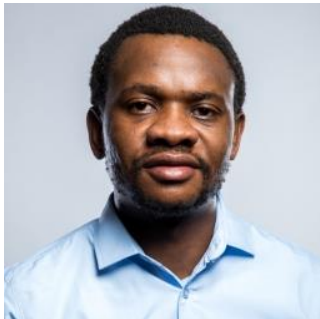
Mlamli Booi is a professional electrical engineer registered with the Engineering Council of South Africa (ECSA) and a Chartered Director (CD(SA)) certified by the Institute of Directors. He is a Professor of Practice at the University of Johannesburg (UJ) due to his contributions to industry and research collaborations. Additionally, he is a member of the Industry Advisory Board for UJ. Currently, he serves as a director of Telkom SA Ltd. He completed an eight-year term as the CEO of SENTECH SOC Ltd, a state-owned ICT infrastructure company. With over thirty years of experience in the ICT sector at various levels of professional responsibility as an engineer, he also has more than twenty years in leadership roles. Mlamli is a seasoned director of companies, specializing in business strategy leadership, innovation management, engineering and engineering management, policy, regulatory strategy, and general management. He currently runs an executive coaching practice focused on leadership development. He holds an MSc in Engineering from UCT (1989) and a postgraduate diploma in project management (1993). He also holds a Diploma in Company Direction from GMT (2006) and certificates in Corporate Innovation from Stanford Graduate School of Business (2019) and Driving Innovation and New Ventures in Established Organisations from Stanford Graduate School of Business (2023). He is currently pursuing a PhD in Electrical Engineering at the University of Johannesburg. He is a member of IEEE and the IoD South Africa. He founded Z-Coms, an ICT consulting firm and led it from 1999 to 2015. In 2015, he was appointed as the CEO of SENTECH.

**Prof Cheikh Ahmadou Bamba Gueye** (*Université Cheikh Anta Diop de Dakar, Senegal*)



Cheikh Ahmadou Bamba GUEYE has been a Professor at Université Cheikh Anta Diop de Dakar since 2010. He obtained his master's degree in computer science from Université Cheikh Anta Diop de Dakar (Senegal), followed by a master's degree in Networking from Université Pierre et Marie Curie - Sorbonne Université in 2003. In December 2006, he earned a Ph.D. in Computer Science from the same institution, Université Pierre et Marie Curie - Sorbonne Universités, Paris, France. Between 2007 and 2010, he was Research Assistant (PostDoc position) at the Université de Liège (Belgium), Electrical Engineering and Computer Science Department. He was a Visiting Scientist at UQÀM (Montréal, Canada) during the 2011/12 academic year. He was general chair of IEEE MNE3SD conference, EAI fellows from class 2021, and involved in several TCP journals and conferences. He is currently an external member of the accreditation agencies of CAMES and ANAQ-Sup. His research interests are in Internet measurements, focusing on geographically locating Internet hosts from its IP address, measurement-based geolocation, Wireless Sensors Networks (WSN), and green cloud computing and network virtualization, with recent focus on improving sustainability concept in underserved areas and sustainable communication networks. His studies spotlight bringing network convergence to connect the unconnected rural and underserved areas for equity and inclusion in online education and Internet access.

**Dr Hlabishi Kobo** (*Council for Scientific and Industrial Research, South Africa*)



Dr. Hlabishi Kobo is a Principal Researcher and Research Group Leader at the Council for Scientific and Industrial Research (CSIR) in South Africa. He leads initiatives in cloud and network architecture, with a focus on 5G, edge computing, and software-defined networking. Dr. Kobo is also a part-time lecturer and adjunct researcher at various South African universities. He earned his BSc and MSc in Computer Science from the University of the Western Cape and holds a PhD in Computer Science. His research encompasses Internet of Things (IoT), network management, and cloud computing, contributing to advancements in smart infrastructure and digital transformation.



**Session Moderator: Prof Serge Fdida** (*Sorbonne University, France*)



(2018-2021)

Serge Fdida has been a Professor with Sorbonne Université since 1995. His research interests are related to the future internet technology and architecture. He has been leading many research projects in Europe, notably pioneering the activity on federated Internet testbeds. He established PlanetLab Europe in 2007 and the OneLab and FIT facilities. He was one of the initiators of the ACM Conext conference, general chair of ACM Mobicom 2015, IEEE Infocom 2019 and in 2021 and started the NetworkingChannel online program. Serge Fdida has also developed a strong experience related to innovation and industry transfer, - he was the co-founder of the Qosmos and Hopcast companies, - one of the active contributors to the creation of the Cap Digital cluster in Paris and President of EIT Health France. He is currently coordinating SLICES, the first large-scale scientific instrument in Digital Sciences, supported by the EU ESFRI framework. Serge Fdida received his PhD from Université Pierre & Marie Curie (UPMC), Paris in 1984. He received his Habilitation in 1989. Assistant Professor UPMC (1983-1987). Associate Professor UPMC (1988-1991). Professor Université Paris Descartes (1991-1995). Sabbatical at IBM Raleigh in 1995. Professor Sorbonne Université. Adviser ITC Department CNRS (2000-2005). Vice-President European affairs of UPMC (2014-2018). VP International Development of Sorbonne Université

#### **Session 4: Capacity Building in Digital Sciences**

**Prof Ahmed Biyabani** (*Carnegie Mellon University Africa, Rwanda*)



Dr. Ahmed Biyabani is an associate teaching professor at Carnegie Mellon University Africa where he teaches courses in AI and digital transformation. His current research interests include AI in healthcare, and telemedicine. He has previously worked with a startup that uses v2v communications for traffic safety and optimization and initiated the collaborative Smart Mobility Lab in Kigali. He helped develop the IEEE 1923.1 standard for energy efficient 5G wireless transmission and 1924.1 for low power digital architectures and is presently working on energy efficient ML hardware. His career spans three decades across the semiconductor industry, teaching, project management and consulting. He holds a SB in Electrical Engineering and Computer Science from the Massachusetts Institute of Technology and MS and Ph.D. degrees in Electrical and Computer Engineering from Carnegie Mellon University.



**Dr Winston Ojenge** (*Africa Centre for Technology Studies, Kenya*)



Researcher of digital technologies and AI at the African Center for Technology Studies (ACTS). Heads the ACTS AI Institute that attempts to: Develop governance structures of AI in Africa; model the future of work; develop capacity in AI; develop technologies to industry and government. Also teaches computer science at the Technical University of Kenya. Earned a PhD in computer science with AI from the Technical University of Kenya.

**Emmanuel Rashayi** (*University of Zimbabwe, Zimbabwe*)



Eng. Emanuel Rashayi is a registered Professional Engineer with Engineering Council of Zimbabwe. He is a Member of ZIE and IEEE (USA). He graduated with a first-class BSc (Hons) in Electrical Engineering in 1999 at the University of Zimbabwe. Briefly worked for South Wales Electric Pvt Ltd in Design and Development of Power and Distribution Transformers before joining the University of Zimbabwe in 2002. He did his MPhil in Electrical Engineering at the University of Zimbabwe. His research studies for MPhil looked at Simulation and Optimization of grid connected Photovoltaic Systems in Zimbabwe. He is the current head of department and Lecturer in Electrical and Electronic Engineering. He is an Academic, consultant and trainer with over 20 years' experience. He has worked with Cisco Systems Inc. (USA) to bring cutting edge technology training in Zimbabwe, Zambia and Namibia. Have received extensive training at Cisco Headquarters in San Jose, California, USA. This was under United States Telecommunications Training Institute initiative. He is the current contact of the instructor training Centre (ITC), Cisco Networking Academy programme with presence in more than 170 countries. He is currently involved in various research and innovation efforts in the energy and power sector through students at bachelors and master's programmes. His department currently runs two bachelor's and three master's programmes.

**Michela Natilli** (*National Research Council of Italy, Italy*)



Michela Natilli is a senior researcher at National Research Council of Italy, in the Institute of Information Science and Technologies. Her work focuses on applied data science with particular interests in the design and development of Big Data Analytics experiments for defining and monitoring statistical indicators for complex social phenomena also in a gender perspective. She is the Infrastructure Manager of the Italian Node of the SoBigData Research Infrastructure, the European Research Infrastructure for Big Data and Social Mining.

**Stavroula Maglavera** (*University of Thessaly, Greece*)



Stavroula Maglavera, Electrical and Computer Engineer, M.Sc. She focuses on high-level coordination and on strategic developments. She specializes in the field of digital technologies, and she gained expertise on designing and executing international scale events in digital science. Her skills encompass exploitation, promotion, and dissemination of technology, and IPR issues. Extensive experience in providing consulting services supporting Public Administration and organizations in the formation and implementation of national and regional strategies for the development and management of digital applications. With more than thirty years of hands-on experience in European, National & Regionally funded programmes and in project management, she still maintains an active interest on design and implementation of research projects in the field on digital technologies. Her current research interests comprise 5G/6G networking, cloud and edge, Research Infrastructures, digital technologies for Health, agrifood, smart cities and e-Government. Participated in more than 50 European research projects in the above areas.

**Session Moderator: Dr Vitalis Ozianyi** (*Strathmore University, Kenya*)



## Session 5 Panel: Economic Dimensions and Sustainability

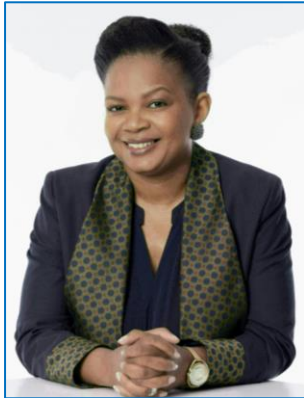
**Dr Charley Lewis** (*Independent Communications Authority of South Africa, South Africa*)



Charley Lewis (PhD, MComm) has extensive experience across the wide field of ICT sector policy and regulation, covering broadband and telecommunications, broadcasting and the Internet. Covering a wide variety of key areas, his expertise ranges from universal access and service, through the digital divide, consumer protection, quality of service, statistics and indicators, to spectrum management and the 4th industrial revolution and 5G. Dr Lewis' varied career includes teaching Mathematics and English at high school level; Information Systems Analyst in the banking sector; Head of IT at COSATU (Congress of SA Trade Unions); Senior Lecturer at the University of the Witwatersrand; and Independent Analyst and Researcher. He has managed and taught professional development and academic courses on ICT policy and regulation to policy-makers, regulators, and industry practitioners. Dr Lewis holds a BA Hons in English, a Higher Education Diploma, an M Comm in Management of Information Systems, and the degree of Doctor of Philosophy. He is an experienced researcher and a published author, with his book, *Regulating Telecommunications in South Africa: Universal Access and Service* (Palgrave Press, 2020) following on from the research for his award-winning PhD thesis. Dr Lewis was part of the Ministerial Task Team on a Post-Covid-19 Economic Response Strategy, having previously served on South Africa's national ICT Policy

Review Panel (2012-2015). He was further recently appointed as an Adjunct Professor at the University of the Western Cape.

**Dr Mmaki Jantjies** (*Telkom Group, South Africa*)



Dr Mmaki Jantjies is one of the foremost strategic leaders in digital transformation and innovation in South Africa. In her current role, she established a group innovation office in the Telkom group. In her role, her office focuses on SMME investment and partnerships, partnerships with universities and research institutions to advance R&D as well as drive internal innovation initiatives in and beyond the group. Dr Jantjies is also an adjunct Associate Professor in Information Systems at the University of the Western Cape, holding a PhD in Computer Science from the University of Warwick. Her research work in ICT4D includes studies on leveraging language translation to support STEM mobile learning platforms in resource-limited environments, particularly rural schools. Understanding the importance of increasing young people's skills development in key STEM areas, she further went on to establish a non-profit organization Peo ya Phetogo, focused on teachers and school children digital skills development in rural and peri - urban schools. She has further served in previous leadership positions as Head of Department in the University of the Western Cape (UWC) and North-West University where she managed the Department of Information Systems leading building capabilities in new strategic programs. She is a World Economic Forum (WEF) Young global leader (YGL) and over 2017-18, Dr Jantjies was the South African representative to the W20 in the G20 focusing on digital inclusion. Dr Jantjies is

a member of the South African Association of Young Scientists (SAYAS). Having been recognized in several awards for her contribution to South African technology landscape with a particular focus on digital inclusion, in 2020 she was awarded the Aspen New Voices fellowship for experts in International Development. She continues to provide thought leadership pieces for a number of publications, appearing as a contributor to diverse platforms which include Fast Company, Popular Mechanics, CNBC and many other technology publications.

**Sabelo Dlamini** (*South African National Research Network, South Africa*)



Mr Sabelo Dlamini is the Director of the South African National Research Network (SANReN), he oversees the country's high-speed research and educational network. He previously oversaw research and innovation at the State Information Technology Agency (SITA) as the senior manager of that department. Before joining SITA, he was International Data Corporation (IDC)'s senior research and consulting manager. He was in charge of IoT and telecoms research in Sub-Saharan Africa, covering more than 20 countries. Additionally, he served as a principal telecoms engineer at the Council for Scientific and Industrial Research (CSIR), where he oversaw the creation of the research group on network function virtualization and software-defined networking. He is a senior member of both the IEEE and SAIEE, and he is registered as a professional engineer (PrEng) with the Engineering Council of South Africa (ECSA). He earned his BScEng (Computer Engineering) and MScEng (Electrical Engineering) degrees from the University of KwaZulu-Natal and the University of Cape Town, in South Africa respectively. Sabelo's research interests are in network automation and orchestration, software-defined networking, and cybersecurity.

**Mark Johnson** (*Square Kilometre Array, South Africa*)



Mark Johnson is passionate about technology transfer and all elements associated therewith. He has more than 15 years' experience in the field, having executed the roles in the public sector both as a fund manager & a technology transfer specialist in the areas of chemistry, biotechnology, and more recently astronomy. Since joining SARAO in November 2018 he has been instrumental in growing the technology transfer portfolio and has been responsible for the formation of two spin-out companies. Mark holds a MSc in Polymer Science, a LLB and hopes to complete his MBA, he enjoys spending time with his family and has a keen interest in walking.





**Prof Vincent Omwenga** (*Strathmore University, Kenya*)



Professor Vincent O. Omwenga is a distinguished academic and consultant with extensive expertise in ICT for Development. His core interests span database design and system integration, system dynamics modeling, artificial intelligence (AI), data mining, business intelligence, statistical computing, and strategic planning. He has led and contributed to numerous high-level consultancy projects across the education, ICT, and health sectors. Notable engagements include developing strategic plans for the Office of the Data Protection Commissioner (ODPC), Norken International Ltd, and Women for Cancer Early Detection and Treatment. He has also worked with organizations such as GIZ, British Council, Aga Khan Foundation, Communication Authority of Kenya, and the International Labour Organization (ILO). Professor Omwenga played a central role in digital skills training, data protection impact assessments, and awareness creation for initiatives like the AU-EU D4D Hub and the UK Digital Access Programme. His work has advanced safe digital access for Persons with Disabilities (PWDs) and supported projects in gender equality, social inclusion, and digital innovation.

He has contributed to the development of frameworks for Kenya's digital trunk radio network, EMR systems for national hospitals, and ICT curriculum design. His technical leadership was also critical in assessing the efficiency of Kenya's Labour Market Information System (KLMIS) and supporting the transition to Competency-Based Education and Training (CBET) in higher education. With a proven track record in managing complex, multi-sectoral projects, Professor Omwenga continues to influence ICT policy, practice, and capacity building across Africa. His work exemplifies the integration of technology with strategic socio-economic goals.

**Dumisa Ngwenya** (*SENTECH SOC, South Africa*)



Mr. Dumisa Ngwenya is a seasoned professional with over 25 years of experience in telecommunications and technology. He currently serves as the Head of Research and Innovation at SENTECH, South Africa, where he leads initiatives in emerging technologies and digital transformation. Mr. Ngwenya has held senior roles across academia, industry, and regulatory bodies. His past positions include Chief Technology Officer at both SENTECH and the Independent Communications Authority of South Africa (ICASA), Research Group Leader at the Council for Scientific and Industrial Research (CSIR), and Senior Lecturer at the University of Pretoria. He has contributed to numerous national and international technical committees, as well as broadband and regulatory initiatives in South Africa and across the Southern African Development Community (SADC). Mr. Ngwenya is a Fellow and Council Member of the South African Institute of Electrical Engineers (SAIEE), and a Senior Member of the Institute of Electrical and Electronics Engineers (IEEE).



**Phila Sithole** (*Association for Comms and Technology, South Africa*)



Phila Sithole currently serves as the Head of Industry Research at the Association of Communications and Technology (ACT), representing major industry players such as CellC, Vodacom, MTN, Liquid Intelligent Technologies, Rain, and Telkom. With over two decades of experience in the technology sector, Phila has been deeply involved in technology innovation and digital transformation. Most recently, he led the implementation of the Presidential Commission on the Fourth Industrial Revolution within the Department of Communications and Digital Technologies (DCDT). Throughout his career, Phila has held various roles in business development, systems engineering, and program management, with expertise spanning sectors such as rail, energy, telecommunications, manufacturing, and air traffic management. Phila's professional journey includes positions at leading multinational corporations such as Siemens, General Electric, Alstom, and Thales, providing him with a broad global perspective.

Academically, he holds an MBA from GIBS, a Master of Technology in Electrical Engineering in Tshwane University of Technology, an MSc in Electrical Engineering from ISIEE Paris, and an MSc in Project Management from the University of Pretoria. He is also a registered professional technologist with the Engineering Council of South Africa.

**Session Moderator: Prof Albert Lysko** (*Council for Scientific and Industrial Research, South Africa*)



Prof Albert Lysko is a Principal Researcher at the Council for Scientific and Industrial Research (CSIR) in South Africa, where he leads innovative research on advanced wireless communications, dynamic spectrum access, and sustainable digital infrastructures. With more than 25 years of professional experience, Prof Lysko has contributed extensively to pioneering trials and the development of national regulations in Television White Spaces (TVWS) and has influenced spectrum policy in South Africa and TVWS regulations in USA. His current research and development efforts focus on energy-efficient 5G and beyond technologies, wireless and laboratory infrastructure solutions, techno-economic analyses within the wireless domain, and AI applications. Prof Lysko has served as a keynote, plenary and invited speaker. He has contributed actively to numerous expert panels, funding review committees, and regulatory forums, reinforcing digital transformation through collaborative research infrastructures across the continent. He also holds numerous professional and IEEE volunteering awards.

## Session 6: Blueprint and Proof of Concept

**Dr Damien Saucez** (*French Institute for Research in Computer Science and Automation, France*)



Damien Saucez did his PhD at UCLouvain, with Olivier Bonaventure, on interdomain traffic engineering with LISP that he standardized at the IETF. From 2011, he applied the Software Defined Networking (SDN) approach to resilient and provable networks at Inria. In 2019 he went to Safran, where he applied SDN to aircraft cabin-networks. Since 2021, he co-leads the development of the SLICES-RI research infrastructure. His research is driven by reproducibility, and he is actively involved in promoting reproducible. Among others he led the ACM SIGCOMM 2017 Reproducibility Workshop and co-chaired several Artifact Evaluation Committees for ACM CoNEXT, ACM SIGCOMM, and AMC IMC.

**Dr Nikos Makris** (*University of Thessaly, Greece*)



Nikos Makris is a Postdoctoral Researcher at the Department of Electrical and Computer Engineering, University of Thessaly, Greece, and the Centre for Research and Technology Hellas (CERTH). He holds a Bachelor's degree (2011), a master's degree in computer science and communications (2013), and a Ph.D. in Electrical and Computer Engineering (2020) from the University of Thessaly. In 2020-2021, he worked as a Postdoctoral Associate at Yale University's Department of Electrical Engineering, USA. Since 2011, he has actively contributed to numerous collaborative research projects funded by the European Union (EU) and the National Science Foundation (NSF). His research focuses on cutting-edge wireless technologies, including Wi-Fi, LTE, and 5G-NR, with an emphasis on real-world experimentation. He is also deeply involved in the control and user-plane disaggregation of base stations, Multi-access Edge Computing (MEC), and NFV orchestration, leveraging open-source platforms.