THE AFRICAN PHYSICS NEWSLETTER

What's New in This Issue of the Newsletter?

AUTHOR
Stéphane Kenmoe,
University of Duisburg-Essen, Germany

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Dear Readers,

On behalf of the editorial team, I am pleased to present the 27th issue of your newsletter, highlighting the latest advances in the physical sciences across the African continent and within the African diaspora. Always at your service, we have made the pursuit of information our guiding principle. The following pages present a compilation of opinions, reflections, scientific events, and visionary activities from your regional editors and generous contributors — all of whom help bring the African Physics Newsletter to life as a shared forum.

When a physicist leads the engineering of tomorrow's elite, the nation's future looks bright. With Her Excellency Raïssa Malu as our focus, we have taken stock of the progress and reforms made since her appointment as minister of state for education and new citizenship in the Democratic Republic of the Congo. In another contribution, she continues to serve in her editorial role, immersing us in an interesting reflection on the now well-guided journey from Earth's riches to the intelligence of the youth. From there, we will leave the Central African region by way of the ingenious Paul Woafo's laboratory, where his homemade educational workbench now provides approximately 80% of basic practical training in electricity and electronics in secondary schools and universities in Cameroon — a windfall for understaffed laboratories in Africa!

In North Africa, Mauritanian youth are playing an active role in building the national community of physicists. The Mauritanian Physical Society is committed to fostering national cohesion and international partnerships and to serving as a catalyst for development. In Tunisia, Haikel Jelassi and Amira Zaouak — president of Women in Nuclear Tunisia — highlight the organization's role in raising awareness, empowering women, engaging youth, and supporting sustainable development through nuclear science and technology for peaceful purposes. Also in Tunisia, our dear contributor Sarra Ben Brik reflects on a year marked by quantum physics and the achievements of the vibrant QUANTUN youth section, which is shaping the future of quantum physics in Tunisia and Africa through events, educational initiatives, and continent-wide collaboration. Everything seems to be coming together to foster cohesion within physics communities in North Africa and its extension into the Arab world, where the Arab Physical Society is celebrating four years of promoting research, education, and international collaboration among physicists across the Arab region.

In East Africa, young researchers are diving into machine learning. The University of Nairobi recently hosted the first East-African School for Young Researchers on Advanced Machine Learning Techniques. We conclude this editorial on an optimistic note: after months of dedicated efforts, the African Strategy for Fundamental and Applied Physics (ASFAP) is nearing its official launch. At the latest open symposium on ASFAP, the hundreds of physicists involved in its development dotted the I's and crossed the T's.

Upcoming Events
African Research Fellowships: Call 2026
https://eo4society.esa.int/2026/03/18/african-research-fellowships-call-2026/

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Do you have a meeting, conference, school, award, etc. you would like posted? Do you have any other news or articles you would like to share with your colleagues? Click here for more information on how to submit this information to the newsletter and share it with colleagues across the African continent.

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The Open Symposium on African Strategy for Fundamental and Applied Physics (ASFAP)

Figure 1: Group photograph of all participants (upper left) and women participants (upper right). Group photograph of virtual participants (lower left) and closing session of participants (lower right). (Photo credit: The Local Organizing Committee at the Abdus Salam International Centre for Theoretical Physics (ICTP), Trieste, Italy)

The African Strategy for Fundamental and Applied Physics (ASFAP) is a continent-wide initiative to define a 10-year roadmap for physics research and education, with a 20-year vision, for Africa. It connects experts internationally to set priorities, drive collaborations, and make practical recommendations for the future. The ASFAP process was launched in 2020 with a mandate from the African Physical Society. Since then, it has received endorsements from many institutions worldwide [1]. The Open Symposium focused on reviewing and improving the draft ASFAP report for publication readiness. The report contains many chapters on physics research, education, and societal engagements important for development and growth in Africa. These chapters were prepared after years of work — since the launch in 2020 — in various working groups convened by experts in the fields.

AUTHOR
Stephen Inkoom,
Ghana Atomic Energy Commission, Ghana

CONTRIBUTING EDITOR
Mounia Laassiri

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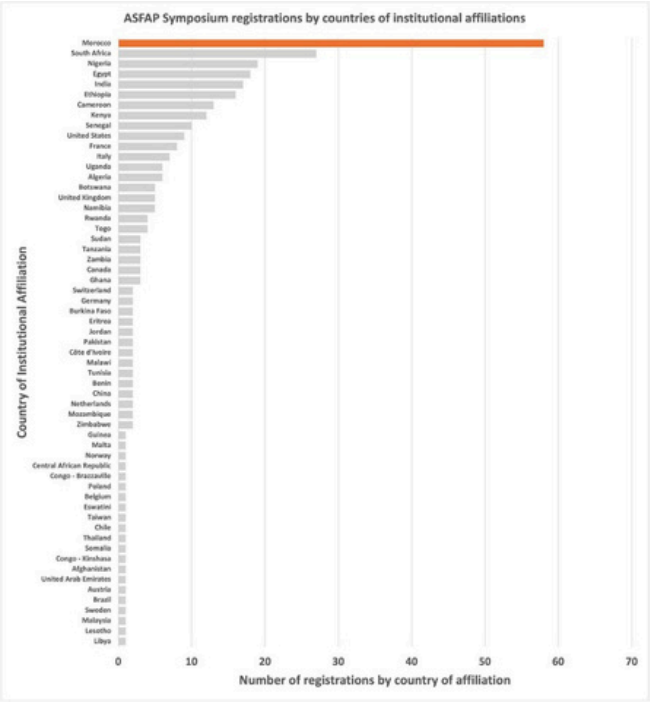

Figure 2: ASFAP Symposium registrations by country of institutional affiliation (Photo credit: Kétévi A. Assamagan)

The symposium received 313 registration interests from 60 countries worldwide, of which 36 were African. It proceeded in a hybrid format with more 72 daily online connections and 36 in-person participants. Sandro Scandolo, Ph.D. of the Abdus Salam International Centre for Theoretical Physics (ICTP), Italy, and Kétévi Adiklè Assamagan, Ph.D., of Brookhaven National Laboratory, U.S., gave the opening addresses. Amal Kasri, Ph.D., of the United Nations Educational, Scientific and Cultural Organization (UNESCO) also gave a presentation titled "UNESCO — The African Strategy of Fundamental and Applied Physics: A Groundbreaking Roadmap for Scientific Transformation," among other speakers. To better inform the development of ASFAP, invited experts presented physics roadmap developments in their region or country. For example, Fernando Quevedo, professor of New York University Abu Dhabi presented the "Landscape of High Energy Physics in Latin America," and Emmanuel Tsesmelis, Ph.D., of the European Organization for Nuclear Research, Switzerland, presented "The European Strategy for Particle Physics." The ASFAP group conveners and contributors presented details on the report chapters, followed by expert discussions and open feedback from participants. The content review of the ASFAP report consisted of a series of presentations, supported by discussions and open feedback, aimed at improving the final report. These exchanges consistently underscored the importance of finalizing the report in a timely manner.

An interview with Radio France Internationale, featuring Assamagan, conducted in the context of the symposium, reiterated the call for increased investment in fundamental and applied research in the physical sciences in Africa [2].

I was excited to attend the symposium. As a co-convener of the medical physics working group of ASFAP, I presented the chapter on "Medical Physics in Africa" and received useful feedback. With my co-conveners, we have implemented the comments received. Similarly, conveners of other ASFAP working groups have improved their chapters with the comments received during the symposium. Though focused on the ASFAP report, the symposium enabled new collaborations. Personally, it offered an opportunity to meet international experts from other physics disciplines and network while making new professional connections.

The report is expected to be finalized in early 2026 after addressing the comments received during the symposium. Then, UNESCO will publish and distribute the report to its member states. Subsequently, the implementation of the recommendations detailed in the report will become the next focus, with discussions and consultations involving the African Union, African governments, the African Academy of Sciences, the Network of African Science Academies, UNESCO, and other institutions interested in improving physics education and research in Africa.

References:

[1] The African Strategy for Fundamental and Applied Physics, https://africanphysicsstrategy.org/
[2] Physical Sciences in Africa: "More investment to develop fundamental and applied research" - Guest Afrique Midi - RFI

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Engineering a Nation: A physicist at work in the Democratic Republic of Congo

Figure 1: H.E. Raissa Malu during her visit to Mwanga High School in Kolwezi, Lualaba Province, January 2025. (Photo credit: Ministry of Education and New Citizenship)

Since her appointment to the editorial team of the African Physics Newsletter, Her Excellency Raïssa Malu (R.M) has remained an active member as both a physicist and educator. In parallel, she has led significant reforms within the ministerial department she heads in the Democratic Republic of Congo (DRC). In a conversation with Stéphane Kenmoe (S.K), she reflects on her transition from science to politics, the progress achieved in her sector, and the challenges she continues to face.

S.K: Eighteen months after joining the government, it is safe to say that you are successfully carrying out the mission entrusted to you by the government. You have several innovative actions and implemented ideas to your credit. Can you briefly outline the highlights of your term in office so far?

R.M: Eighteen months into this mandate, our primary achievement was the strategic definition of our vision through the development of a comprehensive five-year plan (2024-2029). This roadmap, which was our first major innovation, focuses on stabilizing the administrative backbone of our education system while modernizing its core. One of our most visible successes in this modernization effort has been the integration of artificial intelligence into the national state exam (EXETAT) grading process and the launch of the e-diploma secured by blockchain technology, ensuring unprecedented speed, security, and transparency while eliminating the long-standing issue of academic fraud.

AUTHORS & CONTRIBUTING EDITORS
Raïssa Malu,
Ministry of National Education and New Citizenship, Democratic Republic of the Congo

Stéphane Kenmoe,
University of Duisburg-Essen, Germany

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Figure 2: H.E. Raissa Malu at the new state exam copy processing center during visit to Mwanga High School in Kolwezi, Lualaba Province, January 2025. (Photo credit: Ministry of Education and New Citizenship).

Furthermore, we have fundamentally shifted the legal landscape by signing a specific decree to organize and regulate distance learning, supported by the publication of clear implementation measures to ensure educational continuity across the country. This structural progress is reinforced by several key national policies and strategies — ranging from school feeding programs to education in emergency contexts — and complemented by creative pedagogical tools like our newly published series of educational comic books. Finally, we have placed values at the heart of our mission by instituting the "Citizen's Oath,"[1] a daily commitment that anchors the spirit of the "New Citizenship" in every student, preparing them to be dedicated, Congolese patriots.

S.K: When you were appointed, many voices around the world welcomed your appointment as a source of hope and light for the entire African continent. This is particularly because you are responsible not only for education but also for new citizenship. How are you shaping the future Congolese citizen, knowing that your success could be the epicenter of a continental wave of reforms in education throughout the continent and finally in line with the dynamics of contemporary citizenship?

R.M: Shaping the future Congolese citizen is a responsibility we embrace with both humility and determination, as we believe that a transformed Congo can indeed serve as a catalyst for educational renewal across Africa. Our approach is not merely academic; it is a holistic transformation centered on the concept of New Citizenship, which we have integrated into the very heart of our educational system.

We are shaping this future citizen through three strategic pillars. First, by anchoring values in daily life: we have introduced the Citizen's Oath (Serment du Citoyen), a daily commitment recited in schools to instill patriotism, integrity, and a sense of duty from the earliest age. This is supported by our New Citizenship pedagogical kit, providing teachers with concrete tools to foster real character building.

Second, we have launched a major curriculum reform specifically designed to align with the dynamics of contemporary citizenship. By updating subjects such as history and integrating critical themes like GENOCOST (genocide for economic gains), we are ensuring that our youth develop a profound understanding of our national memory and the resilience of our people. This duty of remembrance is essential to forge a strong national identity and to empower students to become active defenders of our country's dignity.

Finally, we are promoting a culture of exemplarity and accountability. Through the use of AI for exam transparency and the systematic publication of our activity reports, we are showing the next generation that merit, transparency, and public accountability are the foundations of a strong nation. By combining this renewed historical consciousness with a deep-rooted sense of civic responsibility, we are building a model of the Complete Citizen — one who is technically skilled, historically aware, and ready to lead the DRC toward a brighter, more sovereign future.

S.K: I would like to return to an aspect that I think is really relevant: the digitization of education and the recent introduction of e-diplomas. How could you achieve this in a country as vast as the DRC? It's simply incredible in a country where the majority of schoolchildren are located in rural areas, most often isolated, without electricity, cut off from the internet, and sometimes even in war zones.

R.M: Achieving the digitization of education and launching the e-diploma in a country with the DRC's unique challenges is indeed a bold step, but it is one rooted in a pragmatic and resolutely inclusive strategy. Our approach does not rely on an idealistic vision of "high-speed internet for all," but rather on a multimodal model designed specifically to ensure that no child is left behind, whether they are in a remote village without electricity or in a conflict zone.

To succeed in this challenge, we have structured our distance learning implementation measures around solutions adapted to the realities of the field. Where connectivity is lacking, we utilize traditional but powerful levers such as educational radio and television broadcasts, as well as the distribution of physical pedagogical kits and printed materials. This means that while the content management and administrative backbone are digitized, the delivery of learning adapts to the local resources available to the student. This organization is supported by an effective decentralization through local resource centers that act as relay points for materials and evaluation standards.

As for the introduction of the e-diploma secured by blockchain, it is actually a major solution for territorial equity. It allows a student in a rural area to obtain an unfalsifiable and instantly verifiable certification, saving them from the long delays or the costly and difficult travel previously required to reach major urban centers. By combining cutting-edge technological management in the back end with adapted local delivery in the front end, we are transforming the vastness of our territory into a testament to our resilience and our commitment to every Congolese child.

S.K: Another technical point: In this age of artificial intelligence, what measures have you taken to link the teaching of physics and mathematics to it?

R.M: To effectively link the teaching of physics and mathematics with artificial intelligence, we have moved beyond theoretical concepts to practical, data-driven applications. This journey began with the Education Quality and Relevance Improvement Project (PEQPESU) (2016-2021), a foundational initiative supported by the World Bank aimed at improving the quality and relevance of secondary education. Under this framework, we distributed more than 20,000 science kits and 10,000 computers, while renovating laboratories and training tens of thousands of teachers to ground science education in experimentation and modern tools.

Building on this infrastructure, we integrated the Whizz Education experience, which represents our most direct application of AI in the classroom. Through the Maths-Whizz virtual tutor, we deployed an AI-powered platform that provides personalized learning pathways for each student. This system acts as a digital tutor, diagnosing individual learning gaps in real time and adjusting the difficulty and pace of mathematical exercises accordingly.

The results have been transformative: schools reported a doubling of enrollment in scientific options and a significant increase in student engagement. By using AI not just as a subject to study, but as a tool to master mathematics and physics, we are creating a feedback loop where student data allows for immediate pedagogical adjustment. This approach ensures that our youth are not only learning science, but are also becoming fluent in the digital and algorithmic environments that define the modern world.

This successful pilot experience with PEQPESU is now being scaled up and institutionalized through our new flagship project, Girls' Learning and Empowerment Project (PAAF) (2024-2028). A central component of this project is the establishment of a robust national digital education platform and the massive deployment of technology in schools. We are installing "Smart Labs" in approximately 388 schools, equipped with digital devices, projectors, and — crucially — solar-charging systems to ensure functionality in non-electrified areas. These labs are pre-loaded with digital textbooks and virtual science laboratories, allowing students to conduct complex physics and chemistry experiments digitally. For schools without full smart labs, we are equipping digital classrooms with mobile devices for teachers to enhance interactive learning. Furthermore, we are digitizing our administrative and pedagogical oversight by providing inspectors and school heads with digital tablets for real-time monitoring. This transition from a pilot phase to a system-wide digital ecosystem ensures that the modernization of mathematics and physics teaching becomes a permanent and inclusive reality across the Democratic Republic of Congo.

S.K: We have long hoped to have people of your caliber in these strategic positions so that they can promote the ideas of sustainable development supported by science. How do you think your mandate will be useful to your scientific community, that of physicists in Africa and around the world?

R.M: Being a physicist in such a strategic position is both a privilege and a responsibility. I believe my mandate serves the scientific community, particularly physicists in Africa and beyond, by demonstrating that science is not just a subject for the classroom, but a powerful framework for decision-making and sustainable development. First, we are promoting a culture of evidence-based governance. By applying the analytical rigor of physics to public policy, we are proving that scientific methods can solve complex societal challenges. This elevates the role of scientists in the eyes of the public and policymakers alike.

"I believe my mandate serves the scientific community, particularly physicists in Africa and beyond, by demonstrating that science is not just a subject for the classroom, but a powerful framework for decision-making and sustainable development."

Second, we are actively securing the future of the scientific pipeline. Through the scale-up of projects like PEQPESU and now the PAAF, we ensure that the next generation of African physicists has the tools to compete globally, regardless of their location.

Finally, we are placing the New Citizenship at the heart of scientific training. We want to remind current and future scientists that they are, first and foremost, citizens. By integrating national history and contemporary challenges like GENOCOST into a modernized curriculum, we are training Complete Citizens who do not just work in labs, but who use their scientific expertise to defend our nation's interests, manage our resources, and safeguard our sovereignty. My mandate is a call to the scientific community: your expertise is essential, but it must be driven by a deep sense of responsibility toward your society.

S.K: Is there a disconnect between your educational and scientific vision and the realities of politics? The former is sometimes forward-looking and long-term, while the latter very often demands short-term results for purely political reasons.

R.M: There is often a perceived disconnect between the long-term nature of scientific progress and the short-term demands of politics, but my approach is to treat them as complementary rather than contradictory. In physics, we understand that a powerful final result depends on the precision of every intermediate step; I apply this same logic to my mandate.

Our five-year plan is the expression of our long-term scientific vision — it is our roadmap for structural change. However, we satisfy the political need for immediate results by delivering quick wins that are actually building blocks of that long-term vision. For example, the integration of AI in EXETAT grading provided an immediate political victory in terms of transparency and speed, but it also served the long-term scientific goal of digitizing our national data infrastructure.

Furthermore, the New Citizenship serves as the bridge between these two timelines. By instilling the Citizen's Oath and updating the curriculum, we are achieving an immediate shift in school culture while simultaneously preparing a generation that will only bear fruit in a decade.

Ultimately, I do not see my role as choosing between the laboratory and the cabinet. Instead, I use the urgency of politics to accelerate the scientific reforms that the DRC has needed for decades. By systematically publishing our activity reports and showing progress through projects, we prove to the public that rigorous, long-term planning is the only way to deliver reliable, short-term results. We are not just managing a ministry; we are engineering a nation.

References:

[1] DRC 'Citizen's Oath: "I swear to serve the Democratic Republic of Congo in all circumstances, with fidelity and loyalty; to love and respect my fellow citizens; to protect the common good; and to promote national unity and fraternity."

Ministry of National Education and New Citizenship. (2024). Five-year plan of the Ministry of National Education and New Citizenship (2024-2029). Government of the Democratic Republic of Congo.

Ministry of National Education and New Citizenship. (2025). Assessment and perspectives: Activity report from June 2024 to February 2025. Government of the Democratic Republic of Congo.

Ministry of National Education and New Citizenship. (2025). 2025 Annual report. Government of the Democratic Republic of Congo.

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A Didactic Workbench for Practical Training in Electricity and Electronics

A young scientist uses the didactic bench.

Figure 1 Photo Credit: Paul Woafo

Conducting experimental research in sub-Saharan Africa is not easy due to a lack of infrastructure. However, there are already several people working to change this situation. Professor Paul Woafo, from Cameroon, has made it his mission to make this possible. He has taken up the challenge of experimental physics, an initiative that highlights the efforts of African scientists to overcome difficulties and break down the barriers to experimental physics. The initiative also develops low-cost experimental physics projects dedicated to promoting local and affordable resources for research. Woafo is not done yet, and his team is brimming with ingenuity in designing and implementing tools that are both inexpensive and effective. Their latest innovation is an educational bench, an all-in-one tool that is useful for both training young scientists and conducting research.

More precisely, the bench is a set of laboratory equipment conceived and fabricated in Cameroon. It looks like a laptop (Figure 1) and is composed of a single block with the following main electric equipment for practical training in electricity and electronics: DC generator, low frequency generator, oscilloscope, ohmmeter, voltmeter, ammeter, capacitance meter, inductance meter, frequency meter, and different electric/electronic components.

AUTHOR
Paul Woafo,
University of Yaounde I, Cameroon

CONTRIBUTING EDITOR
Stéphane Kenmoe

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The bench helps to conduct about 80 percent of the basic practical training in electricity and electronics in secondary schools and universities. It can also be used for research activities.

The bench is affordable compared to the purchase of all of the equipment components included inside it. Moreover, the same equipment can be used by students of different levels. Imagine having a student conducting all of their experiments (including some research investigations) in electricity and electronics using a single piece of equipment during an academic year, or during many academic years. It is also possible to add a function for pulse electric signals (with variable width and frequency), offering a means for some specialized research investigations.

Contact for questions related to the technical specifications: info@sci-tech-services.com or proedu@sci-tech-services.com

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Mauritania on the Physics Map: Forging a National Community

Figure 1: (Top) Guests of honor, sponsors, and government representatives at the first International Congress of the Mauritanian Physical Society (MPS), held in June 2025 in Nouakchott. The event was attended by leaders of physics societies from across Africa. (Bottom, left) Logo of the Mauritanian Physical Society. (Bottom, right) Rabia Yahya, Ph.D., secretary general of the MPS. (Figure Credits: MPS)

In 2025, Mauritania witnessed a significant transformation of its scientific landscape, a change set in motion by the foundational establishment of the Mauritanian Physical Society (MPS) on July 3, 2024. This non-profit organization emerged with a clear, collaborative mission: to unite the nation's physicists, promote research excellence, and advance the understanding and application of physics for national development. The establishment witnessed great efforts from early-career scientists whose dedication and expertise were instrumental in laying the foundation for the society's success.

AUTHORS
Ahmed Bowba Sidi,
University of Tunis El-Manar, Tunisia

Brahim Khalil,
University of Nouakchott, Mauritania

Rabia Yahya,
University of Nouakchott, Mauritania

CONTRIBUTING EDITOR
Stéphane Kenmoe

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A notable feature of this scientific renaissance has been the prominent role of women in leadership positions. Rabia Yahya, Ph.D., secretary general of the MPS, exemplifies this trend. As a faculty member at the University of Nouakchott with a doctorate from Tokyo University of Science, Yahya brings international research experience in electronics and telecommunications to her leadership role. Her active participation in global scientific initiatives, including IEEE activities and the U.S.-Africa Frontiers Fellowship, demonstrates the growing influence of Mauritanian women physicists in both national and international scientific discourse.

The First International Congress: A continental gathering

The inaugural International Congress of the MPS, a three-day event in Nouakchott that concluded on June 18, 2025, was held under the high patronage of the minister of higher education and scientific research. The event successfully translated its ambitious theme into a tangible program of exchange, collaboration, and vision-setting and served as a landmark event in Mauritania's scientific calendar. Under the theme "Physics in the Service of Development," the congress attracted the participation of physics association leaders from Tunisia, Morocco, Senegal, the Arab Physical Society, the African Physical Society, and the West African Physical Society, signaling broad continental support for Mauritania's scientific ambitions.

The congress demonstrated remarkable success in building bridges among academia, government, and industry. Key sponsors included the National Agency for Scientific Research and Innovation, the University of Nouakchott, the Faculty of Sciences and Techniques of the École Normale Supérieure de Nouakchott, and, notably, Mauritania Airlines – marking one of the first instances of major national industry support for fundamental scientific research. "This represents a turning point for science in our country," declared professor Dah Ahmedou Memoune, president of the Mauritanian Physical Society. "We have successfully shown that physics is not just an abstract discipline but a crucial engine for sustainable development and economic growth."

The congress featured an ambitious program that balanced theoretical excellence with practical applications. It highlighted plenary lectures by internationally renowned scientists, oral presentations showcasing cutting-edge research, poster presentations from emerging researchers through thematic sessions covering renewable energy, fluid dynamics, materials, fundamental physics, and related disciplines. The event provided a platform for knowledge exchange among international researchers, local faculty, and doctoral students. Beyond the scientific program, the congress served as a vital organizational meeting. The Society held its General Assembly, where the current executive board was unanimously re-elected — a clear vote of confidence in its leadership. The assembly also ratified an Honorary Advisory Council of eminent scientists, ensuring long-term strategic guidance.

The inaugural congress of the Mauritanian Physical Society was a resounding success. It achieved its goal of being a catalyst for development, not just by discussing physics, but by also actively building the ecosystem — the networks, institutions, and national confidence — required for science to thrive. Crucially, the Society has positioned itself as the essential intermediary platform among the scientific community, government, and industry. By convincing key national institutions and companies to invest in this vision, the Society has proven its ability to translate scientific potential into a national priority. This model ensures that the research generated will be relevant, applied, and supportive of Mauritania's development goals. By concluding with a commitment to make this an annual tradition, the congress has set in motion a process that will undoubtedly help position Mauritania firmly on the global map of scientific research and innovation.

Figure 2: (Left) Members of the MPS at the Third International Conference on Nanosciences and Nanotechnology co-sponsored by MPS. From left to right: Rabia Yahya, Ph.D., secretary general; Dah Memoud, Ph.D., president of MPS; Mohamed Abdellahi Ami, Ph.D. (Top right) from left to right: professor M. Abdellah Lemine Kerim (chair, Magnetic Materials Lab, Imam University, Riyadh, KSA), and professor Lassaad EL MIR (Gabes University, Faculty of Sciences of Gabes, Tunisia), a regular attendee of the first three ICNN editions. (Bottom right) from left to right: Brahim Khalil, Ph.D., and Ahmed Bowba Sidi, Ph.D. candidate in physics. (Photo Credits: MPS)

Expanding international engagement

In a significant development for regional scientific cooperation, Memoune recently represented Mauritania at the seventh Conference of the West African Physical Society (SOAPHYS) in Benin. The Society's participation yielded major achievements, including Mauritania's unanimous acceptance as a full member of SOAPHYS, the selection of Nouakchott to host the 2027 SOAPHYS conference, and the election of Memoune as vice president of the organization. These milestones mark a significant step in integrating Mauritanian physics into the West African research community and open new avenues for regional collaboration and funding. Building on this regional success, professor Ahmed Meissa, the Society's vice president participated in the 44th High Energy and Particle Physics Congress in Cairo, Oct. 20-23, 2025, at the invitation of the Arab Physical Society. During the congress, the vice resident delivered a presentation on "High Energy and Particle Physics in Africa" and showcased the Mauritanian Physical Society's initiatives. The event provided a valuable platform for strategic discussions with Arab Physical Society leaders and other collaborators regarding Africa's scientific research development strategy and future cooperation opportunities with the Mauritanian Physical Society.

MPS demonstrates its growing international engagement through sponsoring the Third International Conference on Nanosciences and Nanotechnology (ICNN 2025), chaired by Professor Mohamed Lemine. Currently a professor of physics at Al Imam University in Riyadh, and MPS' Honorary Advisory Council member, Lemine brings extensive international experience from his previous positions at King Khalid University (Saudi Arabia); Picardie University (France); and the University of Lorraine (France). As the founder and leader of the Magnetic Materials Laboratory at Al Imam University and recipient of numerous awards, including the Chinguitti Award for Sciences and Technologies, he brings considerable expertise to this role. Reflecting on the conference's significance, Lemine stated: "This conference will continue to highlight recent advancements across a broad spectrum of nanosciences and nanotechnologies, with a focus on their integration into various applications."

A foundation for sustainable growth

The establishment of the MPS and its successful inaugural congress have created a sustainable framework for physics development in Mauritania. By fostering both national cohesion and international partnerships, the Society has positioned Mauritanian physicists to contribute meaningfully to continental scientific initiatives while addressing pressing national development priorities. The inclusive leadership model and strategic focus on applied research suggest a promising trajectory for physics in Mauritania, with potential ripple effects across West Africa's scientific landscape.

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From Local to Continental Action: Reflections on a Quantum Year

Figure 1: The Nobel Quantum Breakthrough, Nov. 16, 2025. (Photo Credit: QUANTUN Youth Branch Organizing Committee)

The Tunisian Quantum Network (QUANTUN) Youth Branch organizes annual events to promote the mission of engaging young people in Tunisia in quantum science and technology. This year, it successfully organized its third annual event, titled "The Nobel Quantum Breakthrough," in celebration of the 2025 International Year of Quantum Science and Technology (IYQ) and the 2025 Nobel Prize in Physics. The event, sponsored by the Tunisian Optical Society (STO), took place on Nov. 19, 2025, at Ali El Hili Hall, Faculty of Sciences of Tunis. It began with a warm welcome from professor Adel Megriche, dean of the faculty of sciences of Tunis. The program featured three distinguished speakers, each providing a unique perspective on quantum science. Professor Sihem Jaziri, coordinator of QUANTUN, opened the session with an engaging introduction to wave-particle duality and the tunneling effect, two foundational concepts in quantum mechanics. Professor Najeh Thabet Mliki presented an insightful overview of electron microscopy, pointing out its transformative role in scientific research and its capacity to explore matter at the nanoscale. Following that, professor Samia Charfi Kaddour discussed the 2025 Nobel Prize in Physics, emphasizing its awardees and their remarkable contributions. The session ended with a dynamic panel discussion, moderated by professor Mourad Telmini, coordinator of QUANTUN, providing an interactive space for speakers and participants to discuss the current state and future directions of quantum science.

AUTHOR
Sarra Ben Brik,
University of Tunis El Manar, Tunisia

CONTRIBUTING EDITOR
Stéphane Kenmoe

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The network continues to expand its impact beyond Tunisia by building relations across Africa. As part of this effort, as the coordinator of QUANTUN Youth Branch, I have been appointed national coordinator of Tunisia for the Africa Quantum Consortium (AQC). The AQC brings together Africa's quantum leaders, including researchers, industry innovators, and policymakers, to share knowledge, encourage teamwork, and support the growth of a strong and sustainable African quantum ecosystem.

In line with this vision, I participated in the Africa Quantum Roundtable: Architecting Africa's 2026 Roadmap, which was organized virtually on Dec. 12, 2025. It was an interactive strategy session that brought partners together from across the global quantum community. Rather than formal conferences, the roundtable focused on open discussion and collective thinking, leading to a shared commitment to guide Africa's quantum efforts in 2026. The opening began with a challenging question: "If you had $10 million today, where would you invest it: in hardware, talent, or startups?" This question immediately highlighted the continental vision for quantum science and emphasized the diversity of perspectives among everyone. It established the tone for dynamic discussions, showing the importance of balancing investment priorities. I participated in a session called "Ground Game," which focused on regional leadership and the daily realities on the ground. I spoke about the progress of the QUANTUN Youth Branch from 2022 to 2025. It now brings together 30 active members, and attendance has continued to increase. Our first event in 2025 attracted more than 140 participants, making it the largest gathering so far.

During the roundtable session, we also had the opportunity to speak openly about obstacles, particularly limited funding, gaps in infrastructure, and the need for clearer policy support. Addressing these issues now was seen as essential to avoiding the same constraints in 2026. Overall, the exchange allowed us to recognize our successes, honestly assess our challenges, and come up with practical ways to help quantum initiatives in Africa grow sustainably.

As we continue to grow, our focus will be on developing collaboration, innovation, and hands-on opportunities in quantum science. We hope to lay a strong foundation for the next wave of quantum discoveries and leadership.

Nelson Mandela's lifelong belief that Africa's progress depends on unity, collective action, and initiatives such as the AQC, offers a plan to strengthen collaboration across borders.

""I dream of the realization of the unity of Africa, whereby its leaders combine in their efforts to solve the problems of this continent." - Nelson Mandela

THE AFRICAN PHYSICS NEWSLETTER

Women in Nuclear, in Tunisia: Driving Awareness, Empowerment, and Sustainable Development

Figure 1: WiN Tunisia activities with secondary school students. (Photo Credit: WiN Tunisia)

Over the past decades, Tunisia has made significant progress in promoting gender equality, particularly in education, science, and technology. Since independence, national policies have emphasized women's access to education and professional life, leading to a strong presence of women across scientific disciplines. Today, Tunisian women play an increasingly important role in science, technology, engineering, and mathematics (STEM), including emerging and strategic fields such as nuclear sciences and technologies [1,2].

In the context of climate change, energy transition, and sustainable development, nuclear sciences and technologies are gaining renewed attention worldwide. Tunisia's interest in the peaceful uses of nuclear technologies highlights the importance of public awareness, early education, and inclusive capacity building [3]. Within this framework, Women in Nuclear Tunisia (WiN Tunisia) has emerged as a key actor in promoting women's leadership, scientific engagement, and societal dialogue in the nuclear field [4].

AUTHORS
Amira Zaouak,
Women in Nuclear Tunisia (WiN-Tunisia), National Centre for Nuclear Sciences and Technologies, Tunisia

Haikel Jelassi,
WiN-Tunisia, National Centre for Nuclear Sciences and Technologies, Tunisia

CONTRIBUTING EDITOR
Stéphane Kenmoe

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"For many students, these activities represent their first opportunity to openly ask questions about nuclear sciences in a supportive environment. Observing students during discussions shows a visible transformation: curiosity replaces apprehension, and understanding replaces fear."

Tunisian women have benefited from long-standing progressive social and educational reforms that have enabled their strong integration into higher education, scientific research, and technological fields, leading to high representation in disciplines such as physics, chemistry, engineering, medical sciences, and environmental studies. Their contributions span academia, research institutions, regulatory bodies, and applied technological sectors, including the nuclear field, where women are increasingly active in radiation protection, nuclear medicine, radio-pharmacy, environmental monitoring, safety and security, and scientific research. Although nuclear sciences remain male-dominated globally, Tunisia is witnessing a steady rise in female participation, reflecting supportive institutional frameworks and evolving societal norms. At the same time, growing concerns over climate change and greenhouse gas emissions have highlighted the role of low-carbon solutions, with nuclear energy and nuclear techniques offering valuable applications in health, agriculture, water management, and industry to support sustainable development goals [3,5]. As Tunisia faces increasing energy demands and environmental challenges, strengthening its engagement in nuclear sciences and technologies, within a framework of safety, security, and peaceful use, will depend not only on infrastructure, but also on qualified human resources, transparent communication, public acceptance, and the continued inclusion of women as key drivers of scientific and technological progress.

Public perception of nuclear technologies

Public perception of nuclear technologies is often shaped by fear, misinformation, and limited scientific understanding. Raising awareness and improving scientific literacy are therefore essential. Education and outreach initiatives must start at an early age, introducing young people to basic scientific concepts and highlighting the peaceful and beneficial applications of nuclear technologies. Encouraging young girls to pursue STEM careers is particularly important to ensure diversity and sustainability in the nuclear workforce. Female role models, mentorship, and professional networks play a decisive role in overcoming stereotypes and shaping aspirations.

Women in Nuclear Tunisia: From awareness to empowerment

WiN Tunisia, established as the national chapter of the global Women in Nuclear network, plays a central role in promoting gender inclusion, scientific literacy, and public engagement in nuclear sciences and technologies. The association acts as a bridge between complex scientific knowledge and society, with a strong focus on youth and students (Figure 1).

One of the most impactful dimensions of WiN Tunisia's work lies in its direct interaction with students through in-person training sessions, workshops, and awareness activities. Feedback from participants highlights strong enthusiasm and intellectual engagement. For many students, these activities represent their first opportunity to openly ask questions about nuclear sciences in a supportive environment. Observing students during discussions shows a visible transformation: curiosity replaces apprehension, and understanding replaces fear.

The happiness of students when their questions are answered is reflected in their active participation and sustained interest. Their eyes shine with curiosity, and their engagement often extends beyond the sessions themselves. Many students express interest in joining scientific projects, pursuing nuclear-related research topics, or becoming members of WiN Tunisia. Such experiences demonstrate the power of participatory learning in shaping confidence and motivation.

A particularly illustrative success story involves three student members of WiN Tunisia who participated in an international competition organized by the International Atomic Energy Agency (IAEA). Through their dedication and teamwork, they won the competition and were invited to spend a full week at the IAEA headquarters. During this visit, they discovered the fundamentals of radiation, radiation protection, safety principles, and the wide range of nuclear applications in medicine, industry, agriculture, and environmental protection (Figure 2).

Figure 2: WiN Tunisia student winners at the IAEA General Conference 2025.(Photo Credit: WiN Tunisia)

Following their return, the students described the experience as transformative, highlighting increased self-confidence, deeper scientific understanding, and renewed motivation to pursue careers in nuclear sciences. Their achievements serve as powerful role models for other young people, especially young women, demonstrating that access to knowledge, mentorship, and international exposure can shape professional trajectories.

The position of women in nuclear sciences and technologies in Tunisia reflects broader social progress and growing recognition of women's contributions to scientific advancement. As Tunisia explores nuclear technologies to address climate change, energy security, and sustainable development, inclusive participation and public awareness are essential. Women in Nuclear Tunisia plays a vital role in empowering women, engaging youth, and fostering a responsible nuclear culture based on knowledge, dialogue, and trust. By investing in education, communication, and female leadership, Tunisia strengthens its human capital and lays the foundation for a sustainable, safe, and socially accepted nuclear future.

References:

[1] International Atomic Energy Agency (IAEA). Last edited date not specified. Gender at the IAEA. IAEA. https://www.iaea.org/about/overview/gender-at-the-iaea
[2] UNESCO. Last edited date not specified. Cracking the Code: Girls' and Women's Education in STEM. UNESCO. http://www.unesco.org
[3] United Nations. Last edited date not specified. Sustainable Development Goals: Goal 5 (Gender Equality) and Goal 7 (Affordable and Clean Energy). United Nations. http://www.un.org/sustainabledevelopment
[4] Women in Nuclear Global. Last edited date not specified. Mission, Vision, and Global Activities. Women in Nuclear Global. https://win-global.org/
[5] International Atomic Energy Agency (IAEA). Last edited date not specified. Nuclear Power and Climate Change. IAEA. http://www.iaea.org

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Arab Physical Society: Four years connecting physicists regionally and globally

Figure 1: Second ArPS Summer School on Advanced Physics, Zewail City of Science and Technology, Egypt, Aug. 25–29, 2024 (upper left). ArPS Workshop for Physics Teachers, Feb. 5–7, 2023 (upper middle). First ArPS Summer School on Advanced Physics, Mansoura University, Egypt, Aug. 26–31, 2023 (upper right). International Conference on Laser Physics, Photonics, and Applications, Hurghada, Egypt, Oct. 9-11, 2023 (lower left). Winter School on Quantum Information and Quantum Computing, Hurghada University, Egypt, Feb. 9–13, 2025 (middle right). ArPS-LIRA Workshop on Laser Physics and its Applications, Beni Suef University, Egypt, Feb. 1–9, 2025, (lower right). (Photo credit: ArPS)

This year marks the fourth anniversary of the Arab Physical Society (ArPS) — a milestone that reflects how a shared scientific vision can grow into a vibrant, international community. Founded in 2022 by Arab physicists working across global academic and research institutions, ArPS was created to strengthen physics research, support education, and connect physicists across the Arab region and its diaspora.

Since its inception, ArPS has emphasized the integration of scientific excellence with education, training, and mentorship. By linking fundamental research to real-world applications, the Society aims to generate lasting scientific impact. Today, ArPS brings together around 1,400 members from across the Arab region, spanning a wide range of physics disciplines, and operates as an independent, non-profit organization with an active international outlook.

A defining feature of ArPS is its strong commitment to capacity building. Through a growing program of summer and winter schools, workshops, and conferences, the Society has provided students and early-career researchers with access to advanced topics and direct interaction with leading physicists. These activities — hosted in collaboration with universities and research centers across the region — have helped nurture a new generation of physicists equipped to engage with modern research challenges.

AUTHOR & CONTRIBUTING EDITOR
Mounia Laassiri,
Brookhaven National Laboratory, U.S.

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ArPS has also invested in scientific exchange and visibility, organizing international conferences and maintaining a regular series of online seminars that connect Arab physicists with colleagues worldwide. Complementing these efforts, ArPS publishes the peer-reviewed magazine Trajectories in Physics, which offers accessible scientific content, interviews with leading researchers, and insights into current developments in physics.

Supporting early-career researchers and fostering scientific collaboration remains central to the Society's mission. Through international partnerships, ArPS has facilitated the participation of Arab students in global schools and workshops, helping them build research networks beyond national and regional boundaries.

Four years later, the Arab Physical Society stands as a model of collaborative scientific action, demonstrating how regional initiatives can strengthen research, education, and international engagement. As ArPS looks ahead, it continues to build bridges — within the Arab region and the global physics community — toward a more connected and inclusive future for physics.

References:

[1] http://www.arabphysicalsociety.org/

THE AFRICAN PHYSICS NEWSLETTER

The DRC Geological Exception: a scientific and educational powerhouse for the youth

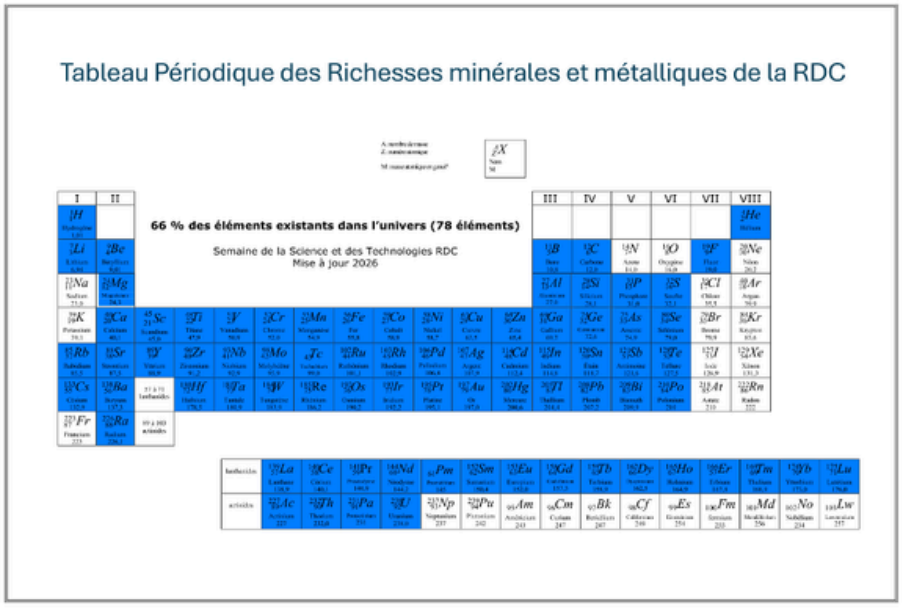

Figure 1: Periodic Table of Mineral and Metal Resources in the DRC. (Photo Credit: Raïssa Malu)

In April 2014, during the first edition of Science and Technology Week (SST), organizers undertook a unique project — identifying within the periodic table, the elements found in the ores and rocks of the Democratic Republic of Congo (DRC). This educational activity embodied the very essence of SST: building a solid scientific culture, promoting Congolese knowledge and expertise, and, above all, inspiring vocations among young people.

This "DRC-branded" periodic table (Figure 1) caused quite a stir. It offered visual proof of what the expression "geological bonanza" truly means. At the time, a deliberately broad inventory (including common elements) identified 75 elements present in the DRC out of the 118 officially listed in the periodic table.

AUTHOR
Raïssa Malu,
Ministry of National Education and New Citizenship, Democratic Republic of the Congo

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The Earth's "norm" vs. the geological exception

Our planet's structure rests on a common foundation: the Earth's crust, composed of nearly 98% of eight elements — with oxygen and silicon leading the way — and an atmosphere that is a stable mixture of nitrogen and oxygen. This matrix, shared by all continents, constitutes the global geochemical "norm." Economic power does not lie in this commonplace abundance, but in the exception. Where metals like cobalt, lithium, or tantalum are merely imperceptible "dust" in the global average, they are found in phenomenal concentrations in specific areas: deposits. It is precisely here that the periodic table leaves the realm of theoretical chemistry to become a lever of sovereignty and geopolitical power.

The country's "mineral signature," which we are about to explore, aligns perfectly with the critical needs of cutting-edge industries, whether in batteries, artificial intelligence through semiconductors, or aerospace. Identifying these strategic resources makes it possible to anticipate major global technological transitions and now positions the country not merely as a reservoir of base minerals, but as an indispensable hub in the global value chain.

Discovering the Congolese periodic table

The Democratic Republic of the Congo is not just the land of "copper and cobalt": its subsoil contains an exceptional range of elements, from base metals to precious metals, from rare earths to radioactive elements. Here are the 78 elements that define our country's unique geological signature (Figure 1).

This table is not merely a scientific inventory. It serves as a lever for sovereignty. By formally identifying these 78 elements (66% of the periodic table according to our methodology), the DRC equips itself with a tool to demand comprehensive analyses of its concentrates and better negotiate the true value of its resources.

From the Earth's riches to the intelligence of the youth

Ultimately, this update of the country's mineral inventory is not merely an exercise in chemical nomenclature; it is an act of reclaiming our destiny. But for these 78 elements to transition from "geological potential" to a driver of inclusive growth, one lever remains more decisive than all others — human capital.

Whether it is the momentum generated by Science and Technology Week during the past 13 years or the profound reforms we are undertaking within the Ministry of National Education and New Citizenship, our ambition remains the same. The goal is to create optimal conditions in the DRC so that our youth are no longer mere spectators of the exploitation of their resources, but the main actors in their transformation.

By investing in a high-quality education focused on science, technology, engineering, and mathematics, we are preparing a generation capable of accelerating the country's technological development. Our ultimate goal is for every Congolese man and woman to be able to actively participate in these changes and reap their benefits. For while the periodic table provides us with the building blocks of the future, it is education that will give us the cement to build a strong, sovereign, and prosperous nation.

"The wealth of modern nations is measured primarily by their capacity for innovation in science and technology; in short, by the quality of human capital they are able to mobilize. "
— Ing. Félix Malu wa Kalenga, Ph.D., Ing. ((1936–2011). Excerpt from his address to the Commission on Education, Scientific Research, and Technology during the Sovereign National Conference (CNS), 1992, Republic of Zaire (now the DRC).
("Ing." denotes a professional engineering degree/title)

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East African School for Young Researchers in Machine Learning

Figure 1: (Left) Participants, organizers, lecturers, and representatives from the National Centre for Scientific Research (CNRS), the French Embassy, and the Faculty of Science and Technology of the University of Nairobi take a group photo. (Right) Lydia Roos, one of the organizers, talks with the participants. (Photo Credit: University of Nairobi Corporate Affairs)

The University of Nairobi (UoN) hosted the inaugural East-African School for Young Researchers on Advanced Machine Learning Techniques (EASY-ML) at its Chiromo campus from July 9 to 22, 2025. The program brought together 40 participants for two intensive weeks of training in artificial intelligence (AI) and machine learning, representing Kenya (30), Tanzania (3), Uganda (2), Rwanda (2), Ethiopia (2), and Ghana (1). The cohort included 19 women and 21 men (postgraduate students and early-career researchers) representing diverse disciplines such as physics, chemistry, biology, geology, computer science, economics, and health sciences.

The school was a collaborative initiative between French and Kenyan partners. The French team included EASY-ML co-directors Dimitris Varouchas (National Centre for Scientific Research [CNRS] and Irène Joliot-Curie lab [IJClab], Université Paris-Saclay) and Lydia Roos (CNRS and Sorbonne Université, Laboratory Nuclear and High Energy Physics), as well as Stéphanie Gautier (CNRS and Montpellier University, Géosciences Montpellier), and Christel Tiberi (CNRS and Montpellier University, Géosciences Montpellier). The Kenyan counterparts included EASY-ML co-director Ian Kaniu (University of Nairobi, Jeremiah Kebwaro (Karatina University); Lucy Kiruri (Kenyatta University); James Mugambi (South Eastern Kenya University); Lydia Olaka (Technical University of Kenya); Livingstone Ochillo (Jaramogi Oginga Odinga University of Science and Technology); and Peter Waiganjo (University of Nairobi).

AUTHORS

Stéphanie Gautier,
National Centre for Scientific Research (CNRS) and Montpellier University, Géosciences Montpellier, France

Ian Kaniu,
University of Nairobi, Kenya

Jeremiah Kebwaro,
Karatina University, Kenya

Lucy Kiruri,
Karatina University, Kenya

James Mugambi,
South Eastern Kenya University

Livingstone Ochillo,
Jaramogi Oginga Odinga University of Science and Technology, Kenya

Lydia Olaka,
Technical University of Kenya

Lydia Roos,
CNRS and Sorbonne Université, France

Christel Tiberi,
CNRS and Montpellier University, France

Dimitris Varouchas,
CNRS and Université Paris-Saclay, France

Peter Waiganjo,
University of Nairobi, Kenya

Figure 2: (Left) Lecturers Edna Milgo (left) and Claire A. David (right) talk during a lecture on machine learning. (Right) Participants pose for a photo at the Hell's Gate Park in Naivasha. (Photo Credit: University of Nairobi Corporate Affairs)

The EASY-ML project is aimed at addressing the need to strengthen skills in machine learning (ML), a technology that has become essential for data analysis, modelling complex phenomena, and driving scientific innovation in different disciplines such as health, fundamental sciences, agriculture, energy, and environmental sciences. The skills attained will enable participants to develop modern research based on quantitative and computational approaches. The participants studied machine learning topics such as linear regression, neural networks, PyTorch, convolutional and graph neural networks, transformers, and generative models. In addition, they participated in hands-on coding exercises using real-world datasets and a final project at the end of the school.

The training took place at the computer laboratory of the Department of Computing and Informatics, located at the Faculty of Science and Technology, Chiromo Campus, in Nairobi. The lab had sufficient computers. The training room was equipped with two smart screens, and internet connectivity was provided to enable remote participation by organizers in France during the opening session. Competent technical staff were present throughout the training, and the organizers thank them for their contribution to the school's success.

The training was delivered by a team of enthusiastic and qualified lecturers from France, South Africa, and Kenya, who were assisted by several teaching assistants from Kenya. The lecturers shared teaching activities tailored to their areas of expertise, enabling learners to benefit from their vast knowledge in AI and machine learning. The lecturers included Claire A. David, Ph.D. (African Institute for Mathematical Sciences, South Africa); Edna Milgo, Ph.D. (Open University of Kenya); Charles Ndung'u, Ph.D. (Laboratoire Interdisciplinaire des Sciences du Numérique, CNRS and the Université Paris-Saclay, France); Isabelle Rocamora, Ph.D. (Institut des Sciences de la Terre, Université Grenoble-Alpes, France); Patrick Gikunda, Ph.D. (Dedan Kimathi University of Technology); Dr. Luca Cadamuro, Ph.D. (CNRS and Université Paris-Saclay, IJCLab, France). The teaching assistants included Jeremiah Thuku (Kenyatta University); Thomas Njoroge, Ph.D. (Karatina University), David Gichohi Maina (Dedan Kimathi University of Technology), and Samson Kinyanjui (Dedan Kimathi University of Technology).

CONTRIBUTING EDITOR
Robinson Musembi

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"The EASY-ML School was a landmark initiative that successfully empowered a new generation of East African researchers with cutting-edge AI and machine learning competencies. It laid a strong foundation for future collaboration and knowledge exchange in the region, fostering a multidisciplinary research culture that is both innovative and responsive to the complex challenges of our time."

The school was not only focused on training but also incorporated networking opportunities, including a gala dinner and an excursion. The participants visited Hell's Gate National Park in Naivasha, where they enjoyed recreational activities and engaged in informal interactions with lecturers and organizers, as illustrated in Figure 2. Additionally, the school featured a poster session during which participants presented their research work to lecturers, organizers, and fellow participants.

The EASY-ML School was a landmark initiative that successfully empowered a new generation of East African researchers with cutting-edge AI and machine learning competencies. It laid a strong foundation for future collaboration and knowledge exchange in the region, fostering a multidisciplinary research culture that is both innovative and responsive to the complex challenges of our time. The momentum built during this inaugural school offers a promising pathway for future capacity-building programs that will continue to strengthen their contribution to the global AI and machine learning ecosystem.

The organizers wish to express heartfelt appreciation to all the facilitators, institutions, and support staff who contributed to the success of the EASY-ML School. Special thanks go to the CNRS, the CNRS Interdisciplinary Research Group on the African Great Rift, the Agence Française de Développement, and the Kenya Education Network for their financial support for the school; the University of Nairobi for hosting the event; the collaborators from France and South Africa for their technical and academic input; and all local and international trainers who shared their knowledge so generously. We also acknowledge the tireless efforts of the organizing committee, teaching assistants, and administrative personnel who worked behind the scenes to ensure the smooth running of the school.