NITheCS Colloquium

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Africa's electric motorbike future can be built locally and powered by solar (our 6,000km ride shows what's possible)

Prof Thinus Booysen (Stellenbosch University) &
Dr Stephan Lacock (Stellenbosch University)

DATE: Monday, 25 May 2026 | 16h00–17h00 SAST

VENUES:
- **Stellenbosch University:** Neelsie Cinema
- **University of the Witwatersrand**: Room P215, 2nd Floor, Physics Building
- **North-West University:** Seminar Room K310, Physics Building G5
- **Online**

--- A recording of the talk will be published on the NITheCS YouTube channel afterwards ---

ABSTRACT

Africa's electric motorbike transition can be home-grown, practical and powered by the continent's abundant solar resource. Drawing on the 6,000 km journey from Nairobi to Stellenbosch on a locally made Roam Air motorcycle charged by solar power, it uses the trip as real-world evidence that electric two-wheelers can handle African distances, road conditions and energy constraints. The piece makes the case that the opportunity is bigger than one expedition: with motorcycles already central to mobility and livelihoods across sub-Saharan Africa, locally assembled electric bikes could cut operating costs and emissions while creating jobs in manufacturing, servicing and charging infrastructure. Its central message is that Africa does not need to wait for imported solutions, but can build its own clean mobility future through local innovation, supportive policy and renewable energy.

BIOGRAPHIES

Prof Thinus Booysen is a professor of engineering at Stellenbosch University and a leading researcher in electric mobility and smart energy systems in Africa. He was part of the pioneering 6,000 km solar-powered electric motorcycle journey from Nairobi to Stellenbosch, a project that demonstrated the potential of clean, locally relevant transport innovation across the continent.

Dr Stephan Lacock is an electric mobility researcher and engineer working at the forefront of African e-mobility innovation. As one of the riders on the groundbreaking solar-powered journey from Nairobi to Stellenbosch, he brings first-hand insight into the technology, challenges and promise of clean transport across the continent.

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