

NITheCS Research Focus Areas Presentations

Date: Friday, 6 March 2026

Time: 10h00 – 17h30

Venue: NITheCS Centre, Merensky Building, Stellenbosch University

Register to attend online: <https://bit.ly/4blC84N>



	Speaker	NITheCS Research Focus Areas
10h00-10h15	Prof Francesco Petruccione <i>NITheCS Director</i>	Welcome
10h15-10h45	Prof Konstantinos Zoubos <i>University of Pretoria</i>	Decoding the Universe: Quantum Gravity and Quantum Fields
10h45-11h15	Prof Pedro Monteiro <i>Stellenbosch University</i>	A South African Community Earth System Modelling Platform: Carbon-Climate Modelling, Education and Innovation in Support of Regional Climate-Development Risk and Opportunities
11h15-11h45	Prof Catherina Esterhuysen <i>Stellenbosch University</i>	Computational Modelling of Functional Materials for Driving Sustainable Innovation
11h45-12h00	Coffee Break	
12h00-12h30	Prof Inger Fabris-Rotelli <i>University Pretoria</i>	Elevating data analytics and machine learning in South Africa: Advancing capacity and statistics and machine learning through focused and collaborative research initiatives
12h30-13h00	Prof Ilya Sinayskiy <i>University of KwaZulu-Natal</i> & Dr Jaco van Zyl <i>University of Cape Town</i>	Quantum Technologies
13h00-14h00	Lunch	
14h00-14h30	Prof Mesias Alfeus <i>Stellenbosch University</i>	Driving Innovation in Finance for Sustainable Growth: Pioneering Solutions for Emerging Markets and Energy Transitions
14h30-15h00	Prof Kevin Duffy <i>University of KwaZulu-Natal</i>	Complexity in Biological Systems E5: Unravelling Complexity in Coupled Earth, Environmental, Economic, Ecological and Evolutionary Systems
15h00-15h30	Prof Zurab Janelidze <i>Stellenbosch University</i>	Mathematical Structures for Foundations and Innovations: Uncovering Universal Theoretical Principles and Building Integrated Mathematical Capacity to Foster South Africa's Future Scientific, Technological, and Economic Progress
15h30-15h45	Coffee Break	
15h45-16h15	Dr Marisa Geyer <i>University of Cape Town</i>	Computational and Theoretical, Gravity, Astrophysics, and Cosmology
16h15-16h45	Prof Marlo Moller <i>Stellenbosch University</i>	Afrocentric Solutions for Disease Control and Health Care
16h45-17h30	Discussions and Conclusion	