



# Centre for High Performance Computing 2024 National Conference

## Monday 02 December 2024

### Special: Quantum Computing 1 - BICC.G-D2 - D2 Tsitsikamma (11:15-12:45)

-Conveners: Chair: Mr Nyameko Lisa

time	[id] title	presenter
11:15	[244] Building a Quantum-Ready Africa: Opportunities and Challenges	Prof. PETRUCCIONE*, Franchesco
11:55	[122] A new approach on a D-wave for obtaining thermodynamic properties of a solid solution.	Prof. WOODLEY, Scott
12:15	[259] The UK National AI Research Resource "AIRR"	Dr CALLEJA, Paul
12:35	[209] Questions	QUESTIONS

### Special: Quantum Computing 2 - BICC.G-D2 - D2 Tsitsikamma (13:30-15:00)

-Conveners: Chair: Mr Nyameko Lisa

time	[id] title	presenter
13:30	[195] Solving a quadratic optimization problem by means of quantum computing using amplitude encoding	MEDIE FAH, Helarie Rose
13:50	[196] Quantum Computing: a tool for simulating physical systems in photonics	NAPE, Isaac
14:10	[197] Data base search through quantum imaging	CONCHA OBANDO, Paola Andrea
14:30	[198] Training phase masks for diffractive networks / Emulating quantum computing with optical matrix multiplication	BEZUIDENHOUT, Hadrian KONI, Mwezi
14:50	[224] Q&A	

# Tuesday 03 December 2024

## **Special: Digital Leadership - BICC.G-B2 - B2 Tsitsikamma (11:00-12:30)**

**-Conveners: Chair: Dr Ricardo Harry**

time	[id] title	presenter
11:00	[214] A multifaceted approach to the IS ecosystems implementation exploring multiple Conceptual and Theoretical Frameworks	Dr HARRY, Ricardo
11:20	[215] Building NICIS' Cloud: Localising the Cloud Platform	Mr MACLEOD, David
11:40	[216] Guiding the adoption of Generative AI and Next Generation NLP	MOODLEY, Avi NAIDOO, Privolen
12:00	[217] Leveraging Hybrid Cloud, HPC and Quantum Computing Resources	Mr LISA, Nyameko
12:20	[218] An Emerging Leadership Paradigm for Navigating a Rapidly Changing World	Mr CHRISTOFFELS, Mervyn