NOTE THAT THE WELCOME FUNCTION IS ON 23 NOVEMBER 2025 AT 18H30 AT MOYO, KIRSTENBOSCH GARDENS (BUS DEPARTS iTHEMBA LABS AT 18H00)

Monday 24 November 2025

iThemba LABS Auditorium

09:00	**Welcome from the Conference Organisers and Safety Briefing - Dr Lindsay Donaldson - Co-Chair of the LOC**		
09:10	**Welcome from iThemba LABS - Prof Victor Tshivhase - MD of iThemba LABS**		
09:15	**Keynote Address - Dr Fulufhelo Nelwamondo - CEO of NRF**		
09:30	**Session 1**	Opening Session	**Andy Buffler - 17** ***(Note: 40 minutes)*** *The Proton Therapy Initiative at the University of Cape Town*
10:10			**Kalliopi Kanaki - 102** *IAEA activities in support of nuclear physics research and applications*
10:35			**Kgashane Malatji - 87** *Physics using the H-line at iThemba LABS*
11:00			**Thuthukile Khumalo - 46** *NUMEN project experimental studies with the K600 spectrometer and MAGNEX detector*
11:15	**Conference Photograph**		
11:20	**Coffee/Tea Break**		
11:45	**Session 2**	Facilities and Instrumentation	**Grzegorz Kaminski - 53** *Status of research at the FLNR, JINR*
12:10			**Gopal Mukherjee - 83** *Investigation of axial and non-axial deformed shapes in nuclei at VECC*
12:35			**Pete Jones - 86** *Portable African Neutron-Gamma Laboratory for Innovative Nuclear Science*
12:50	**Lunch**		
14:00	**Session 3**	Nuclear Structure, Reactions and Dynamics	**Oliver Wieland - 90** *Search for E1 extra strength below giant dipole resonance*
14:25			**Michael Weinert - 95** *On the Nature of the Pygmy Dipole Resonance studied in (γ,γ'), (p,p') and (α,α'γ) Experiments*
14:50			**Refilwe Molaeng - 105** *Study of the K quantum number of pygmy states in 154Sm*
15:05			**Sebenzile Pretty Engelinah Magagula - 45** *Indirect experimental technique for constraining the 193,194Ir(n, γ) cross sections*
15:20			**Mhlangano Nkalanga - 73** *Electromagnetic and thermodynamic properties in the quasi-continuum of mid-mass nuclei through inverse and direct*
15:40	**Coffee/Tea Break**		
16:10	**Session 4**	Nuclear Structure, Reactions and Dynamics	**Kenjiro Miki - 91** *Systematic study of 3n and 3p Systems*
16:35			**Soumya Bagchi - 29** *Collective Excitations in Rare-Earth Nuclei: Insights from Isoscalar Giant Resonances*
17:00			**Lesedi Jafta - 65** *Extraction of the Giant Monopole Resonance strength distribution with Multipole Decomposition Analysis*
17:15			**Benjamin Wellons - 16** *Constructing a calibration standard for photoneutron measurements by extracting cross sections of the giant-dipole resonance response in the heavy nucleus 169Tm*
17:30			**Giovanna Montagnoli - 49** *The trend of 12C + 28Si fusion far below the barrier*
18:00	**Poster Session (18:00 - 19:00)** **- Tasabeeh Jafer** - Abstract ID: 20 **- Musa Maluleka** - Abstract ID: 35 **- Busani Bhengu** - Abstract ID: 26 **- Ophir Ruimi** - Abstract ID: 5 **- Marcin Bielewicz** - Abstract ID: 58 **- Sifundo Binda** - Abstract ID: 103 **- Andreea Gavrilescu** - Abstract ID: 111 **- Craig Vyfers** - Abstract ID: 118 **- Muzomuhle Mlotshwa** - Abstract ID: 15 **- Nkonzo Xulu** - Abstract ID: 55 **- Dimitrios Papadopoulos** - Abstract ID: 98		
18:30			
19:00			

Tuesday 25 November 2025

iThemba LABS Auditorium

09:00	**Workshop Session A**	Nuclear Physics wth Low-Energy Accelerators: Fundamental Symmetries and Nuclear Structure	**Mathis Wiedeking - 115** *Constraining Neutron-Capture Cross Sections with Quasi-Continuum Nuclear Data*
09:25			Q&A with Short Discussion
09:30			**Stephan Malbrunot-Ettenauer - 119** *Collinear laser spectroscopy for the investigation of short-lived radionuclides*
09:55			Q&A with Short Discussion
10:00			**Smarajit Triambak - 114** *Nuclear structure for fundamental symmetry tests: Probing the quark and neutrino sectors with low-energy stable beams*
10:25			Q&A with Short Discussion
10:30	**Coffee/Tea Break**		
11:00	**Session 5**	Nuclear Structure, Reactions and Dynamics	**Katarzyna Wrzosek-Lipska - 25** *Multiple shape coexistence in Cd isotopes studied with Coulomb excitation*
11:25			**Marco Rocchini - 34** *Spherical-oblate shape coexistence in 94Zr and the SPIDER Coulomb-excitation campaign at LNL*
11:50			**Andreas Görgen - 36** *Triaxiality of neutron-rich ruthenium nuclei studied by lifetime measurements*
12:05			**Gabriela Thiamova - 2** *Triaxiality in Mo and Ru nuclei*
12:20			**Abraham Avaa - 40** *Evidence for Shape coexistence and configuration mixing in 158Er via β-decay of Tm isotope*
12:35			**Thifhelimbilu Daphney Bucher - 116** *Low-lying states of 164Hf and the systematics of N=92 isotones*
12:50	**Lunch**		
14:00	**Session 6**	Facilities and Instrumentation	**Tshegofatso Bokhutlo - 60** *Characterization of instrumental background in a (p,γ) reaction studied at the iThemba LABS Tandetron facility*
14:15			**Skye Segal - 28** *Progress in ion source development at the Low Energy Radioactive Ion Beam (LERIB) facility at iThemba LABS*
14:30			**Mauro Romoli - 39** *Measurements of angular distributions of light particles at energies of astrophysical interest with GASTLY apparatus*
14:45			**Semen Mitrofanov - 79** *The DC-140 project: new multipurpose applied science facility at FLNR JINR Accelerator Complex*
15:00	**Coffee/Tea Break**		
15:30	**Session 7**	Applied Nuclear Physics	**Thomas Elias Cocolios - 89** *From uNclear to Nuclear: How nuclear science contributes to our society*
15:55			**Bo Cederwall - 37** *Neutron-gamma emission tomography for security and non-proliferation applications*
16:10			**Shanyn-Dee Hart - 80** *Building a Hybrid Compton Camera System for Improving Medical Imaging Applications*
16:25			**Thomas Leadbeater - 52** *Teaching Old PETs New Signals*
16:40			**Marco Rocchini - 11** *ARDE: Neural network-based algorithms for discrimination between electrons and γ-rays*
16:55			**Vuako Maluleke - 41** *Enhancing the Accuracy of Gamma-Ray Spectrometry Using CNN and KAN Architectures*
17:10			**Dmitry Kamanin - 81** *Light ions accompanied break-up of the medium heavy fission isomers*
18:00	**Public Lecture (Prof Christian Iliadis)**		

Wednesday 26 November 2025

iThemba LABS Auditorium

09:00	Session 8	Nuclear Astrophysics	**Andrea Richard - 97** *Illuminating i-Process Nucleosynthesis via Indirect Neutron-Capture Techniques*
09:25			**Sunniva Siem - 63** *Nuclear Level Densities and Photon Strength Functions measurements*
09:40			**Johan Wiggert Brummer - 113** *Measuring decays of excited states in 26Si to improve reaction rate calculations of 22Mg(α,p)25Al relevant to type I X-ray bursts*
09:55			**Paolo Maria Milazzo - 64** *The Nuclear Astrophysics Program at n_TOF: Past, Present and Future*
10:10	**Coffee/Tea Break**		
10:40	Session 9	Facilities and Instrumentation	**Faical Azaiez - 92** *Highlights from INFN-LNL, the Status and the Future plans of the SPES project*
11:05			**Andrew Stuchbery - 94** *Nuclear structure research at Australia's Heavy Ion Accelerator Facility: Electromagnetic properties and emerging collectivity in atomic nuclei*
11:30			**Mikolaj Cwiok - 71** *Warsaw active-target Time Projection Chamber for studying astrophysical reactions with gamma and neutron beams*
11:45			**Marcin Bielewicz - 57** *PolFEL - the new Free Electron Laser research infrastructure in Poland*
12:00	**Afternoon Excursions with Packed Lunch** Delegates must indicate their preferred excursion and pay for it while registering for the conference		
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Thursday 27 November 2025

iThemba LABS Auditorium

09:00	Workshop Session B	Nuclear Physics wth Low-Energy Accelerators: Nuclear Astrophysics	**Christian Iliadis - 108** ***(Note: 35 minutes)*** *Nuclear Astrophysics of Novae*
09:35			Q&A with Short Discussion
09:40			**Aurora Tumino - 101** ***(Note: 35 minutes)*** *Probing Stellar Reactions and Fundamental Symmetries with Indirect Methods at Low Energies*
10:15			Q&A with Short Discussion
10:20	Workshop	General workshop discussion	
10:50			
11:00	**Coffee/Tea Break**		
11:30	Session 10	Nuclear Structure, Reactions and Dynamics	**AJ Mitchell - 93** *Testing the shell model at N=28 with nucleon-transfer reactions*
11:55			**John Santucci - 67** *Probing 174Yb and 178Hf Structure with (p,t) Reactions*
12:10			**Dinesh Negi - 38** *Nuclear structure studies close to doubly magic 100Sn nucleus*
12:25			**James Smallcombe - 112** *Re-evaluation of Structures in 70Se with SPICE and TIGRESS*
12:40			**Paul Vaandrager - 88** *R-matrix type parametrization of the Jost function for analysing experimental total cross-sections to obtain partial-wave cross sections and resonance parameters*
12:55			**Jean-Marc Sparenberg - 75** *Bragg peak modeling and matter-wave interferometry in gaseous track detectors*
13:10	**Lunch**		
14:15	Session 11	Neutron Physics	**Jorge Lerendegui Marco - 48** *Recent results from the n_TOF facility at CERN*
14:40			**Carlo Cazzaniga - 14** *Characterization of High-Energy Neutron Beamlines Using Silicon and Diamond Detectors*
15:05			**Emanuele Vincenzo Pagano - 32** *Results on the CROSSTEST@LNL experiment for NArCoS: the Cross-talk problem*
15:30			**Tamara Guarda - 21** *Study of Neutron Production through the 45Sc(p,n)45Ti Reaction for Detector Characterization*
15:45	**Coffee/Tea Break**		
16:15	Session 12	Nuclear Structure, Reactions and Dynamics	**Sonia Bacca - 10** *Testing Nuclear Theory on Light Nuclei: Electromagnetic Observables*
16:40			**Akaa Ayangeakaa - 109** *Nuclear Resonance Fluorescence for Nuclear Structure*
17:05			**Jason Holt - 50** *First principles theory for nuclear structure, astrophysics, and new-physics searches*
17:20			**Bahati Mukeru - 30** *Role of a weakly bound core nucleus in the breakup of a weakly bound halo nucleus*
17:35			**Mariia Mardyban - 44** *Microscopic analysis of magnetic (M1) strength in 254No*
17:50			**Muhluri Gerald Maluleke - 33** *Systematic study of Coulomb barrier heights with the double-folding nucleus-nucleus interaction*
18:05			**Tapuwa Sithole - 117** *Breakup Dynamics of a Neutron-Halo System at Sub-Barrier Incident Energies*
19:00	**Bus Departs iThemba LABS for Conference Dinner**		
19:30	**Conference Dinner at Eikenhof Estate in Stellenbosch Farms**		

	Friday 28 November 2025		
	iThemba LABS Auditorium		
09:00	Session 13	Applied Nuclear Physics	**Kseniia Belokopytova - 74** *Exposure to 1 Gy protons, 1 Gy neutrons or their combination at a dose of 0.5 Gy for each particle does not affect emotional state, but affected body weight of rats*
09:15			**Marco Perri - 27** *BEGAM, a new setup for the identification of beta emitters in radiopharmaceuticals*
09:30			**Sankwasa Chika - 110** *Environmental Radiation Assessment of Uranium Exploration Activities in Botswana: A Multi-Detector Approach to Baseline Monitoring and Risk Evaluation*
09:45			**Vladimir Skuratov - 76** *Mechanical stresses in solids irradiated with swift heavy ions: in-situ and postradiation examination*
10:00			**Hesham Ali Abdelbagi Abdelbagi - 6** *Effect of Annealing in a Helium Atmosphere on The Whisker Growth and Surface Degradation of Pristine and Cs-Implanted SiC*
10:15	**Coffee/Tea Break**		
11:00	Session 14	Nuclear Structure, Reactions and Dynamics	**Retief Neveling - 107** *ISGMR studies at iThemba LABS*
11:25			**Ali Mollaebrahimi - 13** *First test of MNT reactions with secondary beams at the FRS Ion Catcher*
11:50			**Evgenii Mardyban - 43** *Analysis of the properties of low-lying states in N=44 isotones from 70Fe to 80Kr*
12:05			**Linda Hlophe - 82** *Theoretical description of direct nuclear reactions in the FRIB era*
12:20			**Lucia Baldesi - 47** *Reaction dynamics in the 58Ni+58Ni system at intermediate energies*
12:35			**H.M. Devaraja - 8** *Systematic studies to produce heavy above-target nuclides in multinucleon transfer reactions*
12:50			**Sergey Lukyanov - 1** *Difference and Peculiarity of multinucleon transfer in reactions induced by 40,48Ca ions on Au and U targets*
13:05	**Lunch**		
14:15	Session 15	Nuclear Astrophysics and Structure	**Atsushi Tamii - 96** *Photoabsorption Cross Sections and Branching Ratios in Light Nuclei Studied by Proton Scattering*
14:40			**Jacob Bekker - 31** *PANDORA Project: Photonuclear Reactions in Light Nuclei*
14:55			**Lauren Bell - 77** *Extracting the Nuclear Level Density and gamma strength function of 90Zr using the Oslo method*
15:10			**Tshegofatso Goitseone Modise - 61** *Investigating the Photon Strength Function for 61Cu using 60Ni (p,g) Reaction at iThemba LABS*
15:25	**Concluding Remarks (Rudzani Nemutudi)**		