

Legend			
RTN	Prof Richard Newman	iTL/SU	
RN	Dr Rudzani Nemutudi	iTL	
PJ	Dr Pete Jones	iTL	
PB	Philip Beukes	iTL	
TL	Dr Tom Leadbeater	UCT	
AM	Abbey Maheso	SU	
BvdV	Prof Brandon van der Ventel	SU	
SP	Dr Steve Peterson	UCT	
SW	Prof Shaun Wyngaardt	SU	
PM	Dr Peane Maleka	iTL	
CV	Dr Charlotte van de Voorde	iTL	
AB	Prof Andy Buffler	UCT	
RL	Prof Robbie Lindsay	UWC	
MRN	Dr Rudolph Nchodu	iTL	
NH	Naomi Hassbroek	iTL	
SK	Dr Saleh Khamlich	iTL	
MM	Prof Malik Maaza	iTL/UNISA	
EL	Dr Elena Lawrie	iTL	
ZB	Dr Zinhle Buthelezi	iTL	
SVF	Dr Siegfried Fortsch	iTL	
MN	Dr Mlungisi Nkosi	iTL	
SY	Dr Sahal Yacoob	UCT	
JM	Dr Joele Mira	iTL	
FN	Dr Fhumulani Nemulodi	iTL	
MS	Dr Muneer Sakildien	iTL	
DH	Dingane Hlaluku	Wits/Rhodes	
SP	Prof Stanislav Pakulyak	JINR	
AG	Prof Alexey Gladyshev	JINR	
AB	Prof. Alexander Belushkin	JINR	
TK	Thuthukile Khumalo		
PF	Phefo Lebogang		
SM	Sizwe Mhlango		
NM	Nametso Mongwaketsi	iTL	
NM2	Noluthando Mayedwa	iTL	
JF	Julian Fredericks	iTL	
JBA	J-Block Auditorium		
JBC	J-Block Computer Lab		
iTLC	iThemba LABS Cafeteria		
JBF	J-Block Foyer		
VC	Visitors centre		
	welcome/opening/closing		
	lunch		
	registration, arrival, departure		
	coffee/tea break		
	hands-on session		
	visit		
	group work		
	lecture		
	event information		

PROGRAMME

	Day	Venue	Person(s)
Thurs, 10 Jan 19			
08h30 - 13h00	Arrival, reception, registration	VC, JBF	
13h00 - 14h00	Lunch	iTLC	
14h00 - 15h15	Arrival, reception, registration	JBF	
15h30 - 15h40	Welcome and Opening	JBA	RTN, RN
15h40 - 15h50	School Overview, Expectations, Health and Safety	JBA	RTN, JF
15h50 - 16h30	iThemba LABS: overview	JBA	MRN
16h30 - 17h30	Tour of iThemba LABS	JBA	RTN
18h00 - 18h30	Supper	iTLC	
Fri, 11 Jan 19			
08h00 - 08h40	Breakfast	iTLC	
09h00 - 10h00	Setting the Scene ...	JBA	RTN
10h30- 11h00	Coffee/Tea Break	JBF	
11h00 - 12h00	Primer on Radiation Safety	JBA	PB
12h00- 13h00	Primer on Radiation Safety	JBA	PB
13h00 - 14h00	Lunch	iTLC	
14h00 - 15h00	Modern Physics in Action	JBA	RTN/AM
15h00 - 15h15	Coffee/Tea Break	JBF	
15h15 - 17h30	Building a light spectrometer	JBA	AM
18h00 - 18h30	Supper	iTLC	
10h00-17h00	Sat, 12 Jan 19 Excursion to Gordon's Bay and Somerset West Mall Sun, 13 Jan 19 Free	JBA	(be ready from 09h45)

Mon, 14 Jan 19		
08h00 - 08h40	Breakfast	iTLC
09h00 - 10h30	Primer on Nuclear Physics	JBA EL
10h30- 11h00	Coffee/Tea Break	JBF
11h00 - 11h30	Primer on Nuclear Physics	JBA EL
11h30 - 13h00	Primer on Radiation Interaction with Matter	JBA SP
13h00 - 14h00	Lunch	iTLC
14h00 - 15h00	Primer on Radiation Interaction with Matter	JBA SP
15h00 - 15h15	Coffee/Tea Break	JBF
15h15 - 17h30	Pracs (Materials, Nuclear)	TBA PJ, PM, MN
18h00 - 18h30	Supper	iTLC
Tues, 15 Jan 19		
08h00 - 08h40	Breakfast	iTLC
09h00 - 10h30	Primer on Environmental Radioactivity	JBA RTN/RL
10h30- 11h00	Coffee/Tea Break	JBF
11h00 - 12h00	Primer on Environmental Radioactivity	JBA RTN/RL
12h00 - 13h00	Primer on Measurement and Uncertainty	JBA AB
13h00 - 14h00	Lunch	iTLC
14h00 - 15h00	Primer on Measurement and Uncertainty	JBA AB
15h00 - 15h15	Coffee/Tea Break	JBF
15h15 - 17h00	Hands-on: Measurement and Uncertainty	TBA AB
18h00 - 18h30	Supper	iTLC

Wed, 16 Jan 19		
08h00 - 08h40	Breakfast	iTLC
09h00 - 10h30	Primer on Accelerator Physics (Accelerators)	JBA JM
10h30- 11h00	Coffee/Tea Break	JBF
11h00 - 12h00	Primer on Accelerator Physics (Ion Sources)	JBA MS
12h00 - 13h00	Primer on Accelerator Physics (Optics and Diagnostics)	JBA FN
13h00 - 14h00	Lunch	iTLC
14h00 - 16h00	Tour of Accelerator facilities	JBA JM, FN, MS
16h00 - 16h30	Coffee/Tea Break	JBF
16h30 - 17h30	Introduction to Data Analysis with Excel	JBC RTN
18h00 - 18h30	Supper	iTLC
19h00 - 10h00	Excursion: Stellenbosch	VC (be ready from 18h45)
Thurs, 17 Jan 19		
08h00 - 08h40	Breakfast	iTLC
09h00 - 10h30	Primer on Computer Programming/Math Methods	JBA BvdV
10h30- 11h00	Coffee/Tea Break	JBF
11h00 - 12h00	Hands-on: Python coding	JBA BvdV
12h00 - 13h00	Hands-on: Python coding	JBA BvdV
13h00 - 14h00	Lunch	iTLC
14h00 - 15h00	Hands-on: Python coding	JBA BvdV
15h00 - 15h15	Coffee/Tea Break	JBF
15h15 - 15h45	Hands-on: Python coding	TBA BvdV
15h45 - 16h30	Hands-on: Python coding	TBA BvdV
18h00 - 18h30	Supper	iTLC

Fri, 18 Jan 19		
08h00 - 08h40	Breakfast	iTLC
09h00 - 10h30	Introduction to Machine Learning, AI and Big Data	JBA BvdV
10h30- 11h00	Coffee/Tea Break	JBF
11h00 - 12h00	Hands-on: Python coding	JBA BvdV
12h00 - 13h00	Hands-on: Python coding	JBA BvdV
13h00 - 14h00	Lunch	iTLC
14h00 - 15h00	Materials at the Nano-scale, fundamentals & technological applications	JBA SK, MM
15h00 - 15h15	Coffee/Tea Break	JBF
15h15 - 15h45	Materials at the Nano-scale, fundamentals & technological applications	JBA SK, MM
15h15 - 17h30	Pracs (Materials, Nuclear)	TBA PJ, PM, MN
18h00 - 18h30	Supper	iTLC
09h00 - 17h00	Sat, 19 Jan 19 free Sun, 20 Jan 19 Excursion: Cape Point and more	JBA (be ready from 08h45)
Mon, 21 Jan 19		
08h00 - 08h40	Breakfast	iTLC
09h00 - 10h30	Primer on Nuclear Spectroscopy	JBA TL
10h30- 11h00	Coffee/Tea Break	JBF
11h00 - 12h00	Primer on Nuclear Spectroscopy	JBA TL
12h00 - 13h00	Visit to PEPT lab	JBA TL
13h00 - 14h00	Lunch	iTLC
14h00- 15h00	Neutron Physics research at JINR and applications	JBA AB
15h00 - 15h15	Coffee/Tea Break	JBF
15h15 - 17h30	Pracs (Materials, Nuclear)	TBA PJ, PM, MN
18h00 - 18h30	Supper	iTLC

Tues, 22 Jan 19		
08h00 - 08h40	Breakfast	iTLC
09h00-10h30	Primer on Particle Physics	JBA SY
10h30- 11h00	Coffee/Tea Break	JBF
11h00 - 12h00	Primer on Theoretical Nuclear Physics	JBA SW
12h00 - 13h00	Hands-on: Nuclear Models (computational)	JBC SW
13h00 - 14h00	Lunch	iTLC
14h00- 15h00	Hands-on: Nuclear Models (computational)	JBC SW
15h00 - 15h15	Coffee/Tea Break	JBF
15h15 - 16h30	Introduction to a virtual laboratory	JBA SW
	Hands-on: Virtual Lab	JBC SW
18h00 - 18h30	Supper	iTLC
Wed, 23 Jan 19		
08h00 - 08h40	Breakfast	iTLC
09h00 - 13h00	Visit to HEPRO Irradiation Facility	JBF
13h00 - 14h00	Lunch	iTLC
14h00- 15h00	Primer on Monte Carlo simulations of Radiation Interactions	JBC PM
15h00 - 15h15	Coffee/Tea Break	JBF
15h15 - 17h00	Hands-on: Monte Carlo Methods	JBC
18h00 - 18h30	Supper	iTLC
19h00 - 10h00	Excursion: Somerset West Mall	VC (be ready from 18h45)

Thurs, 24 Jan 19		
08h00 - 08h40	Breakfast	iTLC
09h00 - 10h30	Primer on Radiobiology	JBA CV
10h30 - 11h00	Coffee/Tea Break	JBF
11h00 - 12h00	Primer on Radiobiology	JBA CV
13h00 - 14h00	Lunch	iTLC
14h00 - 15h00	Visit to Radiobiology Labs	JBF CV
15h00 - 15h15	Coffee/Tea Break	
15h15 - 17h00	rasberry Pi intro and practical	JBA CB/RTN
18h00 - 18h30	Supper	iTLC
Fri, 25 Jan 19		
08h00 - 08h40	Breakfast	iTLC
09h00 - 10h30	Primer on Physics with ALICE	JBA ZB/SVF
10h30 - 11h00	Coffee/Tea Break	JBF
11h00 - 12h00	ALICE Data Analysis	JBC ZB/SVF
12h00 - 13h00	ALICE Data Analysis	JBC ZB/SVF
13h00 - 14h00	Lunch	iTLC
14h00 - 15h00	ALICE Data Analysis	JBC ZB/SVF
15h00 - 15h15	Coffee/Tea Break	JBF
15h15 - 15h45	ALICE Data Analysis	JBC ZB/SVF
15h45 - 16h30	ALICE Data Analysis	JBC ZB/SVF
18h00 - 18h30	Supper	iTLC
Sat, 26 Jan 19		
10h00 - 13h00	Binding Blocks workshop	JBA TK, PL, SM
17h00-19h00	Braai @ iThemba LABS Sun, 20 Jan 19	iTLC
10h00 - 17h00	Excursion: V&A Waterfront	JBA (be ready from 09h45)
18h00 - 18h30	Supper	iTLC

Mon, 28 Jan 19

08h00 - 08h40	Breakfast	iTLC	
09h00 - 10h00	Theoretical Aspects of Particle Physics and Cosmology	JBA	AG
10h30- 11h00	Coffee/Tea Break		
11h00 - 12h00	Joint Institute for Nuclear Research and training programmes at JINR	JBA	SP
12h00 - 13h00	The Final Lecture	JBA	RTN
13h00 - 14h00	Lunch		
14h00- 15h00	Presentation Prep	JBC	
15h00 - 15h15	Coffee/Tea Break		
15h15 - 17h30	Group Presentations	JBA	students
18h00 - 18h30	Supper	iTLC	

Tues, 29 Jan 19

08h00 - 08h40	Breakfast	iTLC	
09h00-10h00	School Evaluation	JBC	students
	Group Photo		
10h00 - 10h30	Coffee/Tea Break		
10h30 - 11h15	Closing	JBC	RTN
11h30	Departure (Eastern Cape group)	VC	
12h30 - 13h00	Lunch	iTLC	
13h00	Departure (rest)	VC	