

Lucas Henry McCONNELL

PERSONAL DATA

PLACE AND DATE OF BIRTH: South Africa | 19 December 1990
CITIZENSHIP: Irish and South African
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EDUCATION

2017 Master of Science in PHYSICS,
The University of Cape Town, Cape Town, South Africa
Thesis: "Suppression of the Fake Lepton Background in Same-sign
W-boson Scattering with the ATLAS Experiment"
Advisors: Dr Sahal YACOOB and Dr Andrew HAMILTON

DECEMBER 2014 Bachelor of Science Honours in PHYSICS,
The University of Cape Town, Cape Town, South Africa
Thesis: "Using a Classical Gluon Cascade to study the Equilibration of
a Gluon-Plasma"
Advisor: Prof. Andre PESHIER

DECEMBER 2013 Bachelor of SCIENCE
Majors in Applied Mathematics, Mathematics, and Physics,
The University of Cape Town, Cape Town, South Africa

DECEMBER 2009 National Senior Certificate, **Bridge House College**, South Africa

WORK EXPERIENCE

2015 Summer Studentship (non-member state) at CERN (EUROPEAN ORGANIZATION FOR NUCLEAR RESEARCH), Geneva, Switzerland
Participated in an experimental analysis concerning charge particle multiplicities with the LHCb collaboration.

2014-CURRENT Tutor at TIPTOP TUTORS (part-time), Cape Town, South Africa
Worked for a private tutoring company. Tutored mathematics and physics at a High School and early Undergraduate level.

2014-CURRENT Tutor at UNIVERSITY OF CAPE TOWN (part-time), Cape Town, South Africa
Tutored and demonstrated (experimental practicals) for first year physics courses.

2010-2013 Technical Clerk at SA FIVE ENGINEERING (part-time), Cape Town, South Africa
Had responsibilities equivalent to a trainee engineer and learnt basic construction work, including grinding, cutting, and welding.

SCHOLARSHIPS AND CERTIFICATES

SEPT. 2015 Graduate of the CERN School of Computing in Kavala, Greece
2015-2017 National Research Foundation (NRF) Innovation Masters Scholarship
2014 Joseph Stone Post-Graduate Bursary

PUBLICATIONS

“Using a Classical Gluon Cascade to study the Equilibration of a Gluon-Plasma”,
Journal of Physics: Conference Series **645** (2015) 012013

“Estimation of jet-faked muon background in W-boson scattering at $\sqrt{s} = 13$ TeV
with the ATLAS detector”, SAIP 2016, Conference Proceedings (Publication Pending)

CONFERENCE AND WORKSHOP ATTENDANCE

DEC. 2016 Attendance at the *International Workshop on Discovery Physics at the LHC*
at the Kruger National Park, South Africa
NOV. 2016 Attendance at the *Bayes School 2016*
at the University of Stellenbosch, South Africa
JUNE 2016 Poster presentation at the South African Institute of Physics Annual Conf.
held at the University of Cape Town, South Africa
SEPT. 2015 Graduated from the *CERN School of Computing*
in Kavala, Greece
FEB. 2015 Presented at High Energy Particle Physics Workshop
at the University of the Witwatersrand, South Africa

LANGUAGES

ENGLISH: Mother tongue
AFRIKAANS: Working knowledge
FRENCH: Basic knowledge

COMPUTER SKILLS

Basic Knowledge: HTML, LINUX, Mathematica
Intermediate Knowledge: C++, Python, Bash, ROOT, \LaTeX
Specialist Knowledge: Familiar with the ATLAS collaboration software

INTERESTS AND ACTIVITIES

Martial arts (black-belt level), Running, Hiking, Technology, Programming,
Travelling (extensively travelled in Europe and North America),
Literature, and History