

ASP2018 - UNAM, Windhoek (NA) 3 July 2018

Dario Barberis

- 1980-2000: work on photoproduction and hadroproduction of particles containing heavy quarks (first c, then b)
- 1996-now: work on the ATLAS experiment at LHC:
 - Previously:
 - Pixel detector layout
 - Tracking software
 - Computing coordination
 - Database coordination
 - Search for rare B-meson decays
 - Currently:
 - Distributed computing monitoring
 - EventIndex design and implementation
 - Search for R-parity violating decays of supersymmetric particles
 - > Search for other exotic highly ionizing particles







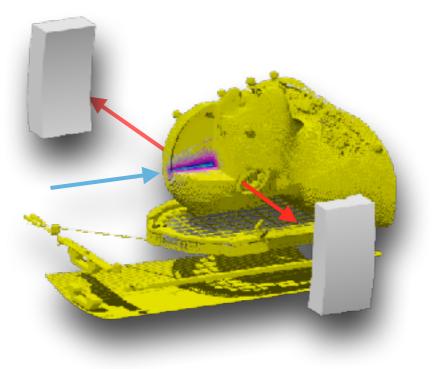
Member of the Geant4 collaboration



I mainly worked on Monte Carlo simulation for Nuclear Physics Medical Applications

- 2011 Master degree in neutrino physics at the University of Rome
- 2012-2015 PhD and Fellow at CERN
 - development of FLUKA (Monte Carlo program) nuclear reaction models
 - collaboration with iThemba LABS for ¹²C fragmentation measures
- 2015-2016 Postdoc at the University of Rome
 - R&D of detectors for medical applications
- since 2017 Postdoc at INFN
 - development of Geant4 nuclear reaction models

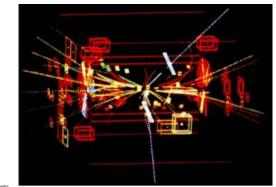
for more info about my work: <u>http://www.roma1.infn.it/~mancinit/</u>

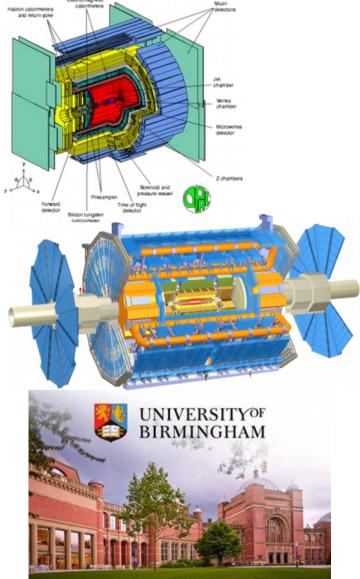


Dave Charlton

About me:

- PhD student on UA1 experiment 1985-1988 (search for the top quark)
- Moved at start of 1989 to OPAL experiment at LEP, stayed to the end (2000) - electroweak physics with Z and W bosons
- Since 1998, ATLAS experiment at the LHC at CERN
 - Spokesperson (Head) of ATLAS 2013-2017
 - Previously deputy Spokesperson (2009-2013), Physics Coordinator (2008-2009)
 - Worked on calorimeter triggering, silicon tracker construction, analysis of multi-boson production
- Poynting Professor of Physics at the University of Birmingham in the UK since 2017 (I've been with Birmingham since 1994, professor since 2005)



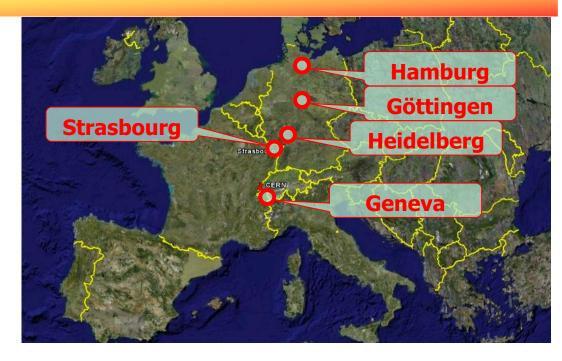




Ulrich.Goerlach@iphc.cnrs.fr, ASP Particle detectors

Who am I?

Ulrich Goerlach



Born in Göttingen, Germany Physics (and Math) studies at the Universities Göttingen and Heidelberg

Diploma (now Master) and PhD at the Max Planck Institute for Nuclear Physics in Heidelberg Post-doc (particle physics) at CERN, Geneva Researcher at University Heidelberg Researcher(staff) at CERN Geneva Researcher(staff) at DESY, Hamburg

University Professor at the Unistra, (Université de Strasbourg)

Introduction – My journey

- Born in Meknes, Morocco
- Master degree Rabat
 Morocco
- PhD in France (CEA/Saclay)
- Post-doc USA (Massachusetts)
- CENRS France
- Staff Scientist USA (Jefferson Lab, Virginia)



Physicist, diversity advocate, music lover. Interested in history, philosophy, cuisine and interior design. Ex volley ball player. <u>@latifaelou</u>

🎯 🔁

Introduction

My Journey

Scientist, Project Leader and Educator

Latifa Elouadrhiri

Spokesperson of major science program to study the nucleon (proton & neutron) "tomography" at Jefferson Lab.

Leader of the construction of state of the art *CEBAF Large Acceptance Spectrometer* **CLAS12** as part of Jefferson Lab 12 GeV Upgrade Successfully completed on budget and on schedule

Advocate for diversity and growth of world-class research and education



Jefferson Lab & its upgrade provides a unique opportunity for the nuclear physics community to expand its reaches into unknown scientific areas. For the first time, researchers will be able to probe the quark and gluon structure of strongly interacting systems. Jefferson Lab at 12 GeV will make profound contributions to the study of hadronic matter - the matter that makes up everything in the world.





Your Lecturer



Eilam Gross

Professor of Physics Department of Particle Physics and Astrophysics Weizmann Institute of Physics <u>Eilam.Work@gmail.com</u> <u>Eilam.gross@weizmann.ac.il</u>

My research:

Search for (yet undiscovered) Higgs decaying to Charm Quarks and tagging heavy quark flavors (in particular Charm).





• 80s-90s: CERN, LEP OPAL Higgs Convener

- 2000s : TESLA LC WS Higgs Convener
- 2010s. : ATLAS, LHC Statistics Convener Higgs Convener (2012) LHC Higgs Combination Convener
- Present. : Charm Physics and ML



Let me introduce myself

Gopolang Mohlabeng

I come from South Africa



Super Short CV

- Undergraduate in Physics, University of Pretoria, SA(2009)
- Honors degree, astrophysics and space science with the NASSP program, University of Cape Town, SA (2010)
- Masters M.Sc. in Physics, University of Kansas, USA (2013)
- Ph.D in Physics, University of Kansas, USA, (2017)
- Postdoctoral Research Associate, Brookhaven National Lab (current)

In high School I did a research project on physicists and chemists in the 1800's and 1900's



John Dalton



Erwin Schrodinger







Niehls Bohr

Richard Feynman

Field of Research

Albert Einstein

JJ Thompson

- Theoretical Particle Physics

High Energy Colliders physics

Low Energy precision physics

- Astro-Particle Physics

Dark Matter Physics: Direct Detection

Low mass dark matter searches

Short CV of Dr. Marco Silari

Dr. Marco Silari graduated in physics in 1982 and obtained a PhD in medical physics in 1985 at the University of Milano. From 1984 to 1995 he was researcher with the Italian National Research Council (CNR) in Milano. He spent the first two years of this period as visiting scientist at the MRC (Medical Research Council) Cyclotron Unit at the Hammersmith Hospital in London (UK), where he worked on the installation of a 40 MeV proton medical cyclotron. From 1987 to 1991 Dr. Silari carried out research work on applied nuclear and radiation physics. From 1991 to 1995 he worked with Prof. Ugo Amaldi on the Italian Hadrontherapy Project, where he was project leader for the feasibility study of the National Centre for Oncological Hadrontherapy (CNAO), which in 2011 started patient treatments in Pavia, near Milano. He was part-time Scientific Associate at CERN from September 1994 to October 1995. He is CERN staff member since 1996, senior physicist since 2001 and holds a diplomatic status since 2015. He was responsible for radiation protection around the SPS, PS and LEP accelerators, for radiation protection of LEP decommissioning and has been involved with radiation protection studies of the LHC experiments and for future CERN accelerators. Within the Radiation Protection group he is now responsible for special projects, which include detector R&D and radiological characterization of materials. He has been scientist-in-charge of the EU Marie Curie projects RADENV (2006-2009) on accelerator radiation protection and ARDENT (2012-2016) on advanced radiation dosimetry. ARDENT involved 14 institutes, universities and private companies worldwide with CERN as coordinator. He is member of two working groups of the EURADOS (European Dosimetry Group). Throughout the years, Dr. Silari has maintained a keen interest in Medical Physics and an academic interest as supervisor of many master and PhD students. He has taught for 13 years at the PhD School of Medical Physics in Milano, he is member of the Scientific Committee of the master in Nuclear and Ionizing Radiation Technologies (NIRT) of the University Institute of Advanced Studies of Pavia. He is author of more than190 scientific publications and holds two patents.

Horst Severini

<hs@nhn.ou.edu>

Horst Severini is a research scientist at the University of Oklahoma (OU) in High Energy Physics.

He works on the ATLAS experiment and is in charge of operating the Tier2 computing facilities at OU.

He is also an Associate Director at the OU Supercomputing Center, where he is in charge of distributed computing, and also a research computing facilitator.

David Bertsche

<david.bertsche@desy.de>

Website: davidbertsche.com

Search for Physics Beyond the SM at Colliders Conclusions Introducing Physics Beyond the SM Search for New Resonances at the LHC Search for Supersymmetry at the LHC

Steve Muanza's Personal Informations (Links are clickable)

Curriculum Vitae

Version in English Version in French

Website

Personal Homepage

Life and ramblings of Mario Campanelli

1995 master in Rome L3



95-98 PhD ETH Zurich L3



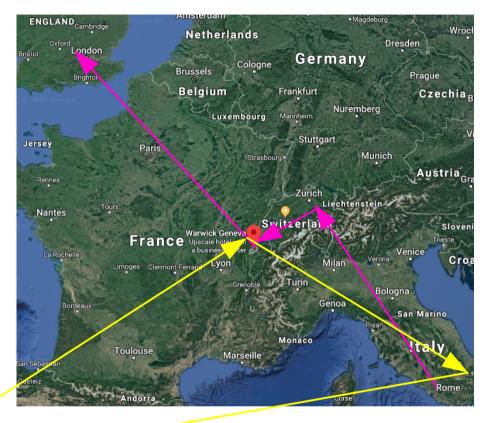
98-2001 ETHZ Icarus











20<u>01-07 Geneva Un</u>iversity CDF



07- UC London Atlas











CURRICULUM VITAE - JONATHAN (JOHN) R. ELLIS

Birth date:1 July 1946Place:London, England

Education

Secondary :	September 1958 - April 1964	Highgate School, Highgate, London, N6
University :	October 1964 - September 1971 October 1968 - September 1971	King's College, Cambridge DAMTP, Cambridge

Examinations and Degrees

1967 - B.A. in Mathematics, University of Cambridge1971 - Ph.D. in Theoretical High Energy Physics, University of Cambridge

Research experience

Oct 1968 - Sep 1970	- Research student in DAMTP, Cambridge
Sep 1970 - Aug 1971	- Visiting Scientist at CERN, Geneva
Sep 1971 - Aug 1972	- Research Associate at SLAC, Stanford
Sep 1972 - Aug 1973	- Richard Chace Tolman Research Fellow in
	Theoretical Physics, Caltech, Pasadena
Sep 1973 - Aug 1974	- Research Fellow at CERN, Geneva
Sep 1974 - July 2011	- Staff Member at CERN, Geneva
Jun 1978 - July 2011	- Indefinite Contract at CERN, Geneva
Aug 2011 onwards	- Emeritus at CERN, Geneva
Sep 2010 onwards	- Clerk Maxwell Professor of Theoretical Physics, Physics
	Department, King's College London

Other positions held

1971 - 1973 1978	- Junior Research Fellow, King's College, Cambridge - Visiting Fellow, King's College, Cambridge	
1978	- Visiting Professor, SLAC, Stanford	
1982	- Visiting Fellow, All Souls' College, Cambridge	
1982 - 1983	- Visiting Professor, SLAC, Stanford	
1987	- Visiting Scientist, SLAC, Stanford	
1988	- Miller Professor, Univ. of California, Berkeley	
1979 - 1982		
and	- Deputy Division Leader, TH Division, CERN	
1984 -1987		
1988 - 1994	- Division Leader, TH Division, CERN	
1994	- Visiting Scientist, SLAC and Physics Department, Stanford	
1996	- University of California and Lawrence Berkeley Laboratory, Berkeley	
1997	- Visiting Professor, University of Melbourne	
1998 - 1999	- Schrödinger Professor, University of Vienna	
1999 - 2011	- Adviser to CERN Directors-General for relations with Non-Member States	

- 2004 2007 Member of the Council of PPARC, the UK funding agency for particle physics, astronomy and space science
- 2005 2010 Visiting Professor, King's College London
- 2006 now Visiting Professor, University College London
- 2006 2007 Member of the Science Committee of PPARC (UK)
- 2007 2010 Member of the Science Board of STFC (UK)
- 2010 now Visiting Professor, Imperial College London
- 2011 2016 ERC Advanced Investigator Grant
- 2013 now Visiting Professor, Hong Kong University of Science and Technology
- 2017 now Estonian Mobilitas Pluss Top Researcher Grant
- 2017 now Distinguished Visiting fellow, TD Lee Institute, Shanghai

Honours

- 1982 Maxwell Medal of the Institute of Physics
- 1985 Elected Fellow of the Royal Society
- 1991 Elected Fellow of the Institute of Physics
- 1994 Honorary Doctorate from the University of Southampton
- 1999 First Award in the Gravity Research Foundation essay competition
- 2005 Dirac Medal and Prize of the Institute of Physics
- 2005 First Award in the Gravity Research Foundation essay competition
- 2006 Honorary Fellow, King's College Cambridge
- 2009 Honorary Doctorate from the University of Uppsala
- 2010 Honorary Fellow of the Serbian Physical Society
- 2011 ERC Advanced Investigator Grant
- 2012 Honorary Doctorate from the St Kliment Ohridski University, Bitola, Macedonia
- 2012 Honorary Doctorate from the Ukrainian Academy of Sciences
- 2012 Appointed Commander of the British Empire (CBE)
- 2012 Honorary Doctorate from the University of Cape Town
- 2014 Fellow of King's College London
- 2015 Bakerian Lecture and Prize, Royal Society
- 2015 Honorary Doctorate from the University of Ioannina, Greece
- 2015 Elected Foreign Fellow of the Indian National Science Academy
- 2015 Elected Foreign Member of the Estonian Academy of Sciences
- 2016 Honorary Doctorate from the University of Patras, Greece
- 2017 Honorary Doctorate from the University of Belgrade, Serbia

Scientific work

I am a theoretical physicist with research interests in particle physics, astrophysics, cosmology and quantum gravity. The discovery of the gluon by experimental teams at DESY in 1979 was based on an idea that I published in a paper in 1976 and suggested to them. In 1977 I used a grand unified theory to predict the mass of the bottom quark, in 1989 I used precision electroweak data to predict the mass of the top quark, in 1990 I initiated the use of these data to predict the mass of the Higgs boson, and in 1991 I calculated its mass in a supersymmetric theory. I have pioneered phenomenological studies of CP violation and the Higgs boson (1976), grand unified theories (1977 and 1978), supersymmetry and dark matter (1983), string models (1988) and quantum gravity (1997). Many of my recent papers (2011-2013) have been on the interpretation of the LHC Higgs candidate, and one was the first reference in the citation for the award of the 2013 Nobel Prize in Physics by the Swedish Academy. In 1995 I suggested searching for a radioactive isotope signature of a nearby supernova

explosion, which has subsequently been measured in many experiments between 1999 and 2016.

Most of my research work has been directly related to experiment, and I frequently coauthor scientific papers with experimental authors. Much of my research work also concerns the prospects for future accelerators such as LEP, the LHC and beyond. I have been a frequent contributor to studies of their physics capabilities, writing the first survey of possible LEP physics in 1976, making the first survey of possible beyond the Standard Model physics at the LHC in 1984, coordinating initial studies of CLIC physics, and now studies of Future Circular Colliders. I was one of the first particle physicists to explore the interface between particle physics and cosmology, which continues to be one of my active research interests.

I am the author of over 1000 scientific papers, with a total of over 60,000 citations in the Inspire high-energy physics database, including 4 papers with over 1000 citations, 15 more papers with over 500 citations and 180 other papers with over 100 citations, for an h-index of 139.

International scientific relations

As advisor to CERN Directors-General for relations with Non-Member States from 1999 to 2011, I had frequent dealings in major partner countries such as the US, Russia, Japan, Canada, India and China. I have also dealt with other partners such as Mexico, Estonia, Pakistan, Iran, South Africa, Israel, Romania, Slovenia, Turkey, New Zealand, Lithuania, Serbia, Algeria, Egypt, Morocco, Madagascar, Qatar, the United Arab Emirates, Saudi Arabia, South Africa, Ukraine, Sri Lanka, Chile, Argentina, Colombia, Azerbaijan, Armenia, Tunisia, Macedonia and Malta.



Luca Serafini luca.serafini@mi.infn.it



Specialist in High Brightness Particle BeamsAdvanced Radiation Sources- Re(Free Electron Lasers, Compton)- assHigh Gradient / Plasma Accelerators- Sci

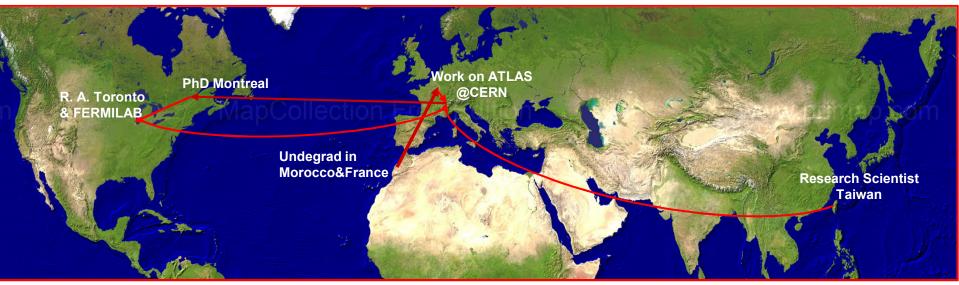


- Research Director at INFN-Milan
- associated with INFN-LNF on SPARC-LAB and EupraXia
- Scientific Director of EuroGammaS (ELI-NP-GBS)
- INFN Project leader of STAR
- Scientific Coordinator of MariX-CDR
- Faculty of INFN-LaSapienza PhD School on Acc. Phys.
 - Former visiting professor at UCLA

African School of Physics 2018 - Windhoek (Namibia), July 2018

Rachid Mazini





- From 1999-now
 - Work on the ATLAS Experiment on the LHC @CERN as a student, Reserach Associate then a Research Scientist.
 - Involded in Lquid Argon Calorimeter construction and operations
 - ***** Software development for jets and E_T^{miss} reconstruction
 - Higgs physics, SM measurements, Dark Matter searches
 - More recently, Timing Detectorr (HGTD) for the ATLAS upgrade for HL-LHC
- 2003-2005. CDF parenthesis.
 - Monte Carlo simulation and SM measuremnts

