CURRICULUM VITAE

Giuseppe De Laurentis

- ***University Email*** giuseppe.de-laurentis@durham.ac.uk
- ***Skype Contact*** giuseppe_dela
- ***Personal Website*** https://gdelaurentis.github.io/
- ***Nationality*** Italian (UK settled)

HIGHER EDUCATION

- **PhD in Particle Physics Phenomenology - Durham University** Oct. 2016 - Jun. 2020 (Expected)
  Institute for Particle Physics Phenomenology
  STFC Scholarship - Supervisor: Daniel Maitre
- **Integrated Master Degree in Physics - First Class - Oxford University** Oct. 2012 - Sept. 2016
  Major Options - Theoretical and Particle Physics - Winton Capital Prize
  Qualifying examinations - Passed with Distinction - Title of Scholar
- **Courses at Harvard University & Stanford University** Summer Terms 2010 & 2011
  Classical Physics (Mark: A), Calculus (Mark: A+), Introduction to Statistics (Mark: A)

ADDITIONAL EDUCATION & EXAMS

- **GREs**: General - Percentile: 95^o (in 2 of 3 sections); Physics - Percentile 87^o 2015
- **SATs** Maths 2 and Physics - Full Marks 2011
- **SUMaC** - Stanford University Mathematics Camp Summer 2009
- Earlier info available upon request

PUBLICATIONS

- **The one-loop amplitudes for Higgs + 4 partons with full mass effects** (arXiv)
  Lucy Budge, John M. Campbell, Giuseppe De Laurentis, R. Keith Ellis, Satyajit Seth 2020
- **Analytical amplitudes from numerical solutions of the scattering equations** (JHEP, arXiv)
  Giuseppe De Laurentis 2019
- **Extracting analytical one-loop amplitudes from numerical evaluations** (JHEP, arXiv)
  Giuseppe De Laurentis, Daniel Maitre 2019
- **The CHY formalism for massless scattering** (link, Unpublished Master Thesis)
  Giuseppe De Laurentis - Supervisor: Yang-Hui He 2016
  Best Physics Master Thesis at Oxford University in 2016

AWARDS

- **Nick Brown Memorial Award at Durham Univeristy** (Travel Grant) 2019
- **Winton Capital Prize for the best MPhys Research Project at Oxford University** 2016

TALKS GIVEN AT CONFERENCES

- **QCD@LHC 2019** - Buffalo, NY - Analytical amplitudes from numerical evaluations (indico)
- **YETI 2019** - Durham, UK - Numerical to analytical amplitudes (indico)

TEACHING

- **3rd Year Foundations of Physics 3A** - Teaching assistant 2018 to 2020
  Durham Univeristy - Department of Physics
- **3rd Year Mathematical Workshop** - Teaching assistant 2016 to 2018
  Durham Univeristy - Department of Physics

ORGANISATIONAL EXPERIENCE

- **YTF 11 & YTF 12** - organising committiee 2019 & 2020
  Conference for early stage researchers in high energy particle physics - indico YTF11, YTF12
- **Computing club** - organiser 2017 to 2020
  Weekly lunch-time seminars on computational methods and tools - website

PHYSICS SCHOOLS ATTENDED

- **QCD Master Class** 9 - 22 June 2019
  Saint-Jacut-de-la-Mer - France
- **MITP 2018 Summer School** 15 July - 3 August 2018
  Mainz Institute for Theoretical Physics - Germany
- **Amplitudes 2017 Summer School** 3 - 7 July 2017
  University of Edinburgh - Higgs Centre for Theoretical Physics - United Kingdom
- **BUSSTEPP** - 47th British Universities Summer School in Theoretical Elementary Particle Physics
  University College London - United Kingdom 21 August - 1 September 2017

INDUSTRY EXPERIENCE

- **Internship at Mecaer Aviation Group** Summer 2013
  I assisted a senior engineer to modify a valve and I wrote reports on experiments made to assess the durability and reliability of a servo-control model (it transmits the cloche signal to the helicopter blades).

SKILLS

- **Python** (open source libraries: lips, seampy)
- **C/C++ & CUDA**
- **GitHub, LaTeX, Mathematica, Office, Origin, TurboPascal, AutoIt**
- **Italian** - Mother tongue
- **English** - Bilingual
- **French** - A2
- **Driving licence** - Patente B - Cars and small motorbikes

ACADEMIC INTERESTS

- **Standard Model phenomenological prediction**
- **Fixed order scattering amplitudes**
- **Differential observables at colliders**
- **Please see the Research Statement document for more information**

FURTHER INTERESTS

- **Travelling** - I travelled through Europe, North and Central America and briefly Turkey and North Africa
- **Computer science** - As a teenager, I have assembled my own high-performance desktop
- **Gaming** - I programmed an AI able to play an international browser game autonomously
- **Classical and medieval history**
- **Science fiction**
- **Aquascaping**