Curriculum Vitae

Lucian Harland-Lang
High Energy Physics Group
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ACADEMIC EMPLOYMENT

- **Postdoctoral research associate** with the High Energy Physics group, University College London (October 2022 – present)
- **STFC Ernest Rutherford Fellow** with the Particle Theory group, University of Oxford (October 2017 – September 2022). 5 year funded position at UK institute.
- **Postdoctoral research associate** with the High Energy Physics group, University College London (October 2014 – September 2017).
- **Postdoctoral research associate** with the Institute for Particle Physics Phenomenology, Durham University (October 2012 – September 2014).

EDUCATION

- **PhD in Theoretical Particle Physics**, (October 2008 – 2012), University of Cambridge. Title: *Standard Candle Central Exclusive Processes.* PhD supervisor: Professor James Stirling.
- **MSci Physics**, (September 2004 – July 2008), Durham University, United Kingdom. Classification: First Class.
  4th year project title:
  Renormalization and Regularization Schemes in Quantum Field Theory.
  Supervisor: Adrian Signer.
- **European baccalaureate**, (September 2003 – June 2004) European School, Culham, UK. Average mark: 90%.

AWARDS, GRANTS AND SCHOLARSHIPS

- **Distinguished Referee** for EPJ (2019).
- **STFC Ernest Rutherford Fellowship** (2017–2022).
- **IPPP Associateship** (October 2011 – September 2012) IPPP (Durham University) programme to support particle physics phenomenology research in the UK, awarded on the basis of scientific excellence. Each associate receives a grant of £4000 to support their research programme. Shared with James Stirling.
- **IPPP Associateship** (October 2010 – September 2011).
- **Cambridge Domestic Research Studentship** (October 2008 – September 2011) 3 year competitive Studentship granted to PhD students by the University of Cambridge.
- **J A Chalmers Prize** (July 2008).
  Awarded by the Department of Physics at Durham University for outstanding performance in theoretical or experimental physics.

SELECTED SCIENTIFIC RESPONSIBILITIES HELD

- **Organiser** of UCL HEP seminar series (2022 – present).
- **Member** of PDF4LHC Working Group.
- **Convenor** of Diffraction in pp and AA session, Diffraction and low x 2024.
- **Topical Convenor** of FPF Snowmass White Paper, QCD Section.
- **Convenor** of Diffraction Theory session, ISMD 2021 and 2022 (invited).
- **Member** of local organising committee, Higgs Couplings 2019.

- ◇ **Examiner** of PhD vivas: Cameron Voisey (2021), Rosalyn Pearson (2021), Emma Slade (2020), Diego Medrano (2019), Luca Rottoli (2018), Wojciech Bizon (2018).
- ◇ **Convenor** of Photon 2019, $\gamma\gamma$ collisions session.
- ◇ **Convenor** of Hard Diffraction and Exclusive Production Working Group, EDS Blois 2017 and 2019.
- ◇ **Convenor** of Implications of LHCb measurements and future prospects workshop, 2018.
- ◇ **Coordinator** of PDF subgroup, High-Luminosity and High-Energy LHC Prospects Working Group.
- ◇ **Convenor** of Structure Functions and Parton Densities Working Group, DIS 2017.
- ◇ **Convener** of 'LHC Working Group on Forward Physics and Diffraction'. **Chair** of low–luminosity subgroup. **Convenor** of FCC working group.

Selected teaching experience

- ◇ **Tutor** Quantum Mechanics course, UCL (2022)
- ◇ **Lecturer**, STFC HEP Summer School, *Collider Phenomenology* (2019–2021).
- ◇ **Supervisor** of PhD student Shaun Bailey with Oxford Particle Theory (2018 – 2021). Title: *Precision Determination of Parton Distribution Functions for the Large Hadron Collider.*
- ◇ **Supervisor** for Summer Internship programme (2018). Topic: *A Combined fit of the W Boson Mass and Parton Distributions.*
- ◇ **Supervisor** for Oxford MMathPhys student dissertations (2018 – 2023).
- ◇ **Lecturer** for MMathPhys course *Advanced Quantum Field Theory for Particle Physics* (2018 – 2023). Course length: 24 lectures.
- ◇ **Tutor** at BUSSTEPP School for 1st year PhD students in particle theory (2016 and 2017).
- ◇ **Demonstrator** for 'Mathematical Methods II' (first year course), UCL (2016 and 2017).
- ◇ **Tutor** for 'Foundations of Physics' (first year course), Department of Physics, Durham University (2012 and 2013).
- ◇ **Supervisor** for 'Particle Physics' (fourth year course), Cavendish Laboratory, Cambridge (Michaelmas term 2010 and 2011).

Selected Outreach Activity

- ◇ **Speaker** at Jersey College for Girls. Title: *Being a particle physicist (and how mathematics fits in)* (2021).
- ◇ **Speaker** at Oxford University Physics Society. Title: *QFT, the SM and the LHC* (2021).
- ◇ **Speaker** at Saturday Morning of Theoretical Physics. Title: *The Structure of the Proton* (2019).

Research interests

Phenomenology of Quantum Chromodynamics and the Standard Model at high–energy colliders. My primary topics of research are the extraction of parton distribution functions, as a member of the MSHT global fitting collaboration, and central exclusive production.

Refereeing

- ◇ **SciPost Physics** (2018 –)
- ◇ **Nuclear Physics B** (2016 –)
- ◇ **Physics Letters B** (2014 –)
- ◇ **European Physics Journal C** (2014 –)
- ◇ **Physical Review Letters** (2019 –)
- ◇ **Journal of High Energy Physics** (2020 –)

Other skills

- ◇ Programming: C++, Fortran, Python.
- ◇ Operating systems: Mac OS, Linux, Windows.
- ◇ Documentation: LaTeX.
- ◇ Languages: English (fluent), French (advanced), Spanish (basic).