

layout: archive

title: "CV"

permalink: /cv/

author\_profile: true

redirect\_from:

- /resume

{% include base\_path %}

## Summary and Impact of Research

My PhD focused on quantum interference in strong-field processes, directly resulted in 7 first author publications, including one in Phys. Rev. Lett. Following my PhD I was invited to Instituto de Ciencias Fotónicas (ICFO) in Barcelona, Spain for two weeks and the Wuhan Institute of Physics and Mathematics (WIPM) in China for a month to collaborate. I recently finished a two-year Engineering and Physical Sciences Research Council (EPSRC) funded fellowship at the University College London (UCL) quantum science and technology institute (UCLQ), investigating quantum metrology and previously neglected quantum effects in strong field systems. Since November I have been doing a postdoc at the Instituto de Ciencias Fotónicas (ICFO) in Barcelona, researching entanglement and quantum simulators in strong field systems. I was awarded a Marie Skłodowska-Curie Individual Fellowship to commence in September at Aarhus University in Denmark.

## Education and Qualifications

Duration	Establishment	Qualifications
22/09/2014 - 28/01/2019	University College London (UCL)	PhD in Physics
27/09/2010 - 26/06/2014	University of Bristol (UoB)	MSci (Physics and Maths) with First Class Honours

## Work and Experience

Duration	Establishment	Line Manager	Description
02/11/2020 - ongoing	ICFO, Barcelona	Prof. Maciej Lewenstein	<b>Role:</b> Postdoctoral researcher working on theory of novel quantum simulators – connecting areas (NOQIA) focusing on strong field physics, quantum simulators and quantum effects
14/01/2019 - 13/01/2021	UCL, Quantum Science and Technology Institute (UCLQ)	Prof. Andrew Fisher	<b>Role:</b> Postdoctoral Fellow EPSRC Fellowship in Quantum Technologies at UCLQ: Quantum Sensing and Entangled Interferometry of Orbitals [quantum information of strong-field systems]

Duration	Establishment	Line Manager	Description
13/11/2018 - 12/12/2018	WIPM, Wuhan	Prof. Xiaojun Liu	<b>Role:</b> Visiting Researcher Collaboration on electron holography in molecules.
29/10/2018 - 08/11/2018	ICFO, Barcelona	Prof. Maciej Lewenstein	<b>Role:</b> Visiting Researcher Collaboration on NSDI and writing a review paper.
22/09/2014 - 28/01/2019	University College London	Prof. Carla Figueira de Morisson Faria	<b>Role:</b> PhD Student Thesis: <i>Strong-Field Interference of Quantum Trajectories with Coulomb Distortion and Electron Correlation</i>
23/09/2013 - 22/06/2014	University of Bristol	Prof. James Annett	<b>Role:</b> Masters Student Masters project: Berry phase of phonons in graphene.
29/07/2013 - 20/09/2013	University of Bristol	Dr. Steve Brierley	<b>Role:</b> Summer Student Quantum information project, investigating MUBs in six dimensions. Funded by the Heilbronn Institute, a partnership between UoB and the UK Government Communication Head Quarters (GCHQ).
11/06/2012 - 31/08/2012	University of Bristol	Prof. Jeremy O'Brien, Dr. J. P. Hadden	<b>Role:</b> Summer Student Quantum information project in photonics on spin properties of diamond colour centres, Nuffield undergraduate research programme.

## Publication Summary:

[Google Scholar Page](#): **Andrew S Maxwell**, [ORCID](#): **0000-0002-6503-4661** and [Scopus ID](#): **56816436900**.

**20 publications** (not including PhD Thesis): **12 first author publications** in leading international journals, including **1 in Phys. Rev. Lett.**, 2 review papers in Rep. Prog. Phys., 1 in the Faraday Discussions, 5 in Phys. Rev. A, 1 in Phys. Rev. B, 2 in J. Phys. B, 1 in Linear Algebra Appl, 3 conference proceedings and 4 on arXiv under review.

## Talks, Conferences and Workshops Summary:

I have organised **1 talk** on quantum technologies by Fujitsu and I am on the organisation committee for the **Quantum Battles conference**. I have given **18 talks** at conferences and institutions, **8 international talks**, **5 invited talks** and **3 virtual talks**.

## Supervision Experience Summary:

I have **lectured at a postgraduate level** and demonstrated undergraduate courses. I have supervised one MSc student, the project resulted in two publications one in press and one in preparation. I also played a significant role in the **supervision of 5 masters** students and **1 PhD** student.

## Reviewing:

Communications Physics (Nature), 2 Physical Review A (APS), 2 Journal of Physics A: Mathematical and Theoretical (IOP), Journal of Physics B: Atomic, Molecular and Optical Physics (IOP).

## Computer Skills:

Skilled in: C, C++, Mathematica, python and Unix/ Linux. Competent in: Matlab.

## Funding

Date	Description
01/09/2021 - 31/08/2023	Marie Skłodowska Curie Individual Fellowship at Aarhus Univeristy
14/01/2019 - 13/01/2021	Two year EPSRC fellowship in quantum technologies at University College London quantum (UCLQ).

## Teaching List

Date	Role	Course Title/Description
23/09/2019 -13/12/2019	Demonstrator	Practical Physics & Computing 1 -- in python (University College London)
25/09/2017 -15/12/2017	Marker	Theory of Dynamical Systems (University College London)
07/11/2016 - 09/11/2016	Lecturer	Graduate Programming Courses in C++ (University College London)
11/01/2016 - 08/02/2016	Demonstrator	Practical Mathematics with Mathematica (University College London)
11/11/2015 - 13/11/2015	Demonstrator	Graduate Programming Courses in C++ (University College London)
12/01/2015 - 02/02/2015	Demonstrator	Practical Mathematics with Mathematica (University College London)

## Prizes

Date	Description
31/08/2017	Extreme Light Infrastructure Summer School (ELISS), second place poster prize.
28/06/2017	<a href="#">UCL Hackathon</a> , my team was awarded first prize.
10/02/2016	<a href="#">UCL Hackathon</a> , my team was awarded runner up prize.
31/05/2016	Atomic and Molecular Interactions Group (AMIG), runner up prize for best talk.
27/07/2015	International Conference on Phontonic, Electronic and Atomic Collisions (ICPEAC), Europhysical Journal (EPJ), first prize for best poster.