THOMAS BAILEY

PhD Candidate in Physics — Seeking Trainee Patent Agent and Science Policy Opportunities

Professional Summary

Physics PhD candidate specializing in experimental quantum optics, with expertise in technical analysis, scientific research, and communication. Skilled in evaluating complex technologies, engaging stakeholders, and translating technical concepts into clear, actionable insights. Passionate about advancing innovation through intellectual property and science policy. Seeking a Trainee Patent Agent or science policy position to apply my scientific expertise, analytical thinking, and technical writing skills to protect cutting-edge technologies and shape science-driven policy solutions.

EDUCATION

PhD in Physics 2020 – June 2025 (Expected)

University of Ottawa, Canada

Thesis: "Novel Methods and Applications of Weak Measurements in Optics"

MPhys in Physics (4-Year Integrated Masters)

2016 - 2020

University of Oxford, United Kingdom

First Class, Ranked 5th in cohort (85% average).

Relevant Skills

Technical Writing: Crafting precise descriptions of complex scientific phenomena and experimental setups.

Research & Analysis: Conducting thorough literature reviews and systematic data analysis.

Interdisciplinary Communication: Translating complex physics concepts for diverse audiences.

Attention to Detail: Ensuring accuracy and precision in technical documentation.

Project Management: Coordinating research projects with multiple stakeholders and timelines.

EXPERIENCE

Mathys & Squire

December 2018

Work Experience in Patent Law

London, United Kingdom

- Gained practical knowledge of patent content structure and application processes.
- Reviewed technical patent examiner reports and drafted a response letter under supervision.
- Learned about prior art searches and patent claim drafting considerations.

Koralli Consulting

November 2019 – Present

Research Consultant & Co-Founder

Oxford, United Kingdom (Remote)

- Researched and wrote articles on technology adoption and quantum technologies.
- Strengthened technical communication and interdisciplinary teamwork.
- Participated in business strategy and value proposition development discussions.

University of Ottawa

Teachina Assistant

September 2020 – Present

• Explain complex physics concepts with precision and clarity through lectures and written materials.

- Explain complex physics concepts with precision and clarity through lectures and written materials
 Provide detailed technical feedback on student work, emphasizing accuracy and logical reasoning.
- Serve as CUPE 2626 Union Steward; awarded 2023 Departmental Peer Mentorship Award.

Support Our Science

March 2023 - Present

Ottawa, Canada

Ottawa, Canada

- Executive Council

 Led a research project analyzing minimum stipend levels across Canada.
- Coordinating grassroots efforts to support the Vote Science campaign in the 2025 Federal election.
- Advocated for graduate research funding through stakeholder engagement.

LANGUAGES

English (Native/Fluent)