

Ting-Yun CHENG (Sunny)

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Education

School of Physics and Astronomy, University of Nottingham

PhD in Physics

Nottingham,

United Kingdom

Oct 2017 – Oct 2020

- **Supervisor:** Prof. Christopher J. Conselice and Prof. Alfonso Aragón-Salamanca
- **Thesis:** The Narrative of Galaxy Morphological Classification Told Through Machine Learning

Institute of Astronomy, National Tsing Hua University

MSc in ASTRONOMY

Hsinchu, Taiwan

Sep 2014 – Aug 2016

- **Supervisor:** Prof. Ing-Guey Jiang
- **Thesis:** Investigating Dark Matter Distribution in Early-Type Galaxies

Department of Physics, National Taiwan Normal University

BSc in PHYSICS

Taipei, Taiwan

Sep 2010 – Jun 2014

Work Experience

Department of Physics, Durham University

Postdoctoral Research Associate, Grade 7

Durham,

United Kingdom

Nov 2020 – Now

Teaching Experience

Department of Physics, Durham University

Durham, United Kingdom

Nov 2020 – Now

- **Postgraduate Course Demonstrator, 2023–**
 - 4-week Data Analysis workshop
 - 4-week HPC/ science computing workshop
- **Laboratory Demonstrator, 2020–2022**
 - Year 1 Discovery Physics
- **Supervision: 4th year/Master projects**
 - S. Howie, 2023/2024
 - G. Renton, 2023/2024
 - V. Desai, 2022/2023, Master of Physics, Class I (Honours) [Project Mark: Class I]
 - T. M. Hehir, 2022/2023, Master of Physics, Class I (Honours) [Project Mark: Class I]
 - S. M. William, 2021/2022, Master of Physics, Class I (Honours) [Project Mark: Class I]
 - A. Lowe, 2021/2022, Master of Physics, Class II Division 1 (Honours) [Project Mark: Class I]
- **Supervision: UG summer projects**
 - S. Bilacz, July-August 2023 (6 weeks program), Department of Physics

School of Physics and Astronomy, University of Nottingham

Nottingham, United Kingdom

Oct 2017 – 2020

- **Coursework Marker, 2017–2020**
 - PHYS1001 (F31CO1): From Newton to Einstein
 - PHYS1004 (F31QP1): Quantitative Physics

Institute of Astronomy, National Tsing Hua University

Hsingchu, Taiwan
Sep 2015 – Aug 2016

- **Teaching Assistant for Summer Program in Astrophysics**
 - The program included one-week lectures of General Astronomy and the tutorial of astronomical softwares, two-days observation trip at the Lulin Observatory (Taiwan), data analysis, and seminars.
- **Teaching Assistant**
 - Compulsory course — ASTR610000: Observational Astronomy

Department of Physics, National Tsing Hua University

Hsingchu, Taiwan
Sep 2014 – Aug 2016

- **Teaching Assistant**
 - Optional course — PHYS317000: Numerical Analysis
 - Optional course — PHYS241000: General Astronomy (I)
 - Optional course — PHYS242000: General Astronomy (II)

Observation Proposal

- **Issac Newton Telescope/INS, Spain**, August 2023, 4 nights

Awards and Grants

Dark Energy Survey Travel Grant

- Supporting excellent early career researchers to attend DES Fall collaboration meeting (\$1600)

Fermilab
United States
Aug 2023

Discretionary Award

- For exceptional contribution within the role as Post Doctoral Research Associate to Durham University

Durham University
United Kingdom
Jul 2023

Physics Department Award for Excellence

- For contributing extensively to the health and well-being of the astronomy group.

Durham University
United Kingdom
Sep 2022

The Alan Turing Institute Post- Doctoral Enrichment Awards

- The award offer flexible funds to top researchers in data science to build on their current research and develop and grow activities. (£2000)

The Alan Turing Institute
United Kingdom
2022

Graduate School Travel Prize

- The prize supports postgraduate students at the University of Nottingham to attend national/international conference/meeting. (£600)

University of Nottingham
United Kingdom
Sep 2019

Conference/Meeting Travel Grants

- The prize supports researchers to attend national/international conference/meeting. (£300)

Royal Astronomical Society
United Kingdom
Aug 2019

Kavli Student Fellow

- Stipend offers to the selected fellow of the Kavli Summer Program in Astrophysics. (Approximately \$2000)

*UC Santa Cruz
United States
Jul 2019 – Aug 2019*

Vice-Chancellor's Scholarship for Research Excellence (International)

- PhD living stipend and full tuition awarded to top international applicants. (£20,700+£12,000 annually)

*University of Nottingham
United Kingdom
2017 – 2020*

ASROC Special Award for Oral Presentation

- Awarded to an excellent postgraduate student at the Annual Meeting of the Astronomical Society in Taiwan (ASROC).

*Astronomical Society ROC
Taiwan
2016*

Academic Service

- **Referee for peer-review Journals:** MNRAS, ASCOM, ApJ, A&A, Phys. Rev, PASP, RASTI

- **Academic Enrichment**

Dark Energy Survey (DES) Organisation

- Co-convener** of the *Galaxy evolution & QSO* working group (Dec 2022–)
- Early Career Mentor-Mentee program (2023/2024): Mentor for undergraduate/graduate students in DES

Dark Energy Spectroscopic Instrument (DESI) Organisation

- DESI Education and Public Outreach (EPO) Committee (Aug 2023–)
- Early Career Mentor-Mentee program (2023/2024): Mentor for undergraduate/graduate students in DESI

Astronomy and Computing (ASCOM)

- ASCOM is a peer-reviewed journal, published by Elsevier, that focuses on the broad area between astronomy, computer science, software development and information technology.

- Early Career Researcher editorial board (November 2022–)
- Co-editor** of a special edition: “*Machine Learning Techniques in Modern Astronomy*” (in preparation)

Taiwanese Young Researcher Association (TYRA)

- Project Tyra provides a platform for Taiwanese young researchers in diverse research fields to share their academic experience and develop collaborations with each other.

- IT supports (April 2022–November 2023)
- Chair of weekly seminar (Oct 2022–November 2023)

Centre for Astronomy and Particle Theory, *University of Nottingham*

- Organiser** of weekly lunch talk at CAPT (2019–2020)

Student Union, *Physics department, National Taiwan Normal University*

- Academic activity leader (2012-2013)
- Orientation event organiser (2012)
- Outreach activity leader of the Physics camp for 15-18y students (2011-2012)

EDI & outreach activities

- **EDI Activities & volunteering**

CEA/ICC/CfAI/Physics, Durham University, 2022 —

- Durham IDEA is a monthly discussion group to talk about, raise awareness, interact and share ideas about Integration, Diversity, Equity and Accessibility.
 - i) **Co-organiser** of IDEA discussion sessions:
 - *Imposter Symptoms* (28 February 2022)
 - ii) **IDEA group members**
- PhD/ECR Yearly Career Activities
 - i) **Leading organiser** of annually PhD/ECR career activities (Jan 2022—)
- Designer of the mental health awareness poster at Physics department (2021)

EDI panel/talks:

- *Invited Panelist: "How to thrive your PhD", Alan Turing Institute, Oct 2022*

Volunteering activities:

- Audio book producer, *Foundation for the Blind in Taiwan, 2015 – 2016*
- Amanuensis, *Special Education Centre, National Taiwan Normal University, 2013 – 2014*
- Care group for families of natural disaster victims, *2010 – 2011*

• Outreach Activities

Talks/lectures:

- Lecture at the Newcastle Astronomical Society (September 2023)
- Lecture at the Sunderland Astronomical Society (July 2023)
- Space Night at the Woodham Academy, Durham (November 2022)
- Regular speaker for general audience at CUNY Baruch College Forum (2022–2023)
- Regular speaker for general audience at TYRA (2021–2022)

Other activities:

- Planetarium show, Physics department, Durham University (since July 2023)
- Science Festival, Durham University (since March 2023)
- Durham Astronomy Girl's Day, Physics department, Durham University (since Jan 2023)
- Eyes to the Sky Project, Physics department, Durham University (Dec – Jan 2023)
 - We work with and support students of rural schools to understand science and astronomy.
- Digital Art Project, Ogden@20 schools' day, Physics department, Durham University (Oct – Dec 2022)
 - We work with students at local schools to make a film for the Ogden@20 celebration at the Physics department.

NTNU Physics Camp, Student Union of Physics, NTNU (2010—2014)

- The summer and winter multiple-days Physics camps for 15-18y students were we conveyed the concept of Physics through a variety of activities.