

EDUCATION

National Taiwan University (NTU)

B.S. in Physics & B.A. in Economics (with Honors)

GPA: 4.17/4.30 (4th out of 87, Department of Physics)

Taipei, TWN

09/2021 – Expected 06/2025

FIELDS OF INTEREST

Economic Theory, Applied Econometrics, Social Networks

RELEVANT COURSEWORK

- **Economics (Grad. Level):** Topics on Mechanism Design (A+), Economics of Social Learning and Networks (A+), Economic Analysis of Social Networks (A+), Econometric Theory I (A/A+), Decision Theory in Econometrics (A+)
- **Mathematics:** A Modern Approach of Differential Equations (A+), Applied Mathematics III (Group Theory & Complex Analysis) (A-), Bayesian Statistical Methods (A-), Cosmology (A+) (w/ Differential Geometry)

GRANTS & AWARDS

- **College Student Research Creativity Award**, National Science and Technology Council (NSTC) 07/2024
- **Excellent English as Medium Instruction (EMI) Teaching Assistant Award**, NTU 06/2024
- **Dean's List Award (Top 5%)**, Department of Physics, NTU Spring 2024
- **Outstanding Undergraduate Research Poster Award**, Department of Physics, NTU 05/2024
- **Research Grant for University Student**, NSTC 07/2023 – 02/2024
- **I-Sian Outstanding Essay Award**, Department of Economics, NTU 01/2024
- **Honorable Mentions for Essays on Humanities**, College of Liberal Arts, NTU 2022, 2023, 2024

RESEARCH EXPERIENCE

Research Assistant - Professor Chih-Sheng Hsieh

05/2024 – Present

Department of Economics, NTU

- Collaborating on *A Weighting Approach to Correct Estimation Biases in Network Formation Models due to Random and Non-Random Missing Samples*
- Establishing computational algorithms such as double Metropolis-Hastings algorithm (DMH) and approximate Bayesian computation (ABC) for posterior sampling in high-dimensional weighted network statistics
- Working on the initiative project *Policy Analysis with Partially Observed Networks*
- Estimating the effects of endogenous network changes induced by policy treatments and their welfare outcomes with bias-corrections in structural network models
- Assisting on the working paper *Collaboration in Bipartite Networks* (R&R at AEJ: Micro)

Thesis Student - Professor Jimmy Hing Chi Chan

02/2024 – Present

Department of Economics, NTU

- Undergraduate thesis: *Social Learning with Rational Inattention (tentative)*

- Analyzing how agents rationally interpret preceding movers’ actions as signals and incorporate them into their private information acquisition strategies.

Undergraduate Research Fellow – Professor Hsuan-Wei Lee

07/2023 - 02/2024

Institute of Sociology, Academia Sinica

- Completed the initiative project *Opinion dynamics on heterogeneous agents: A social network perspective*
- Developed agent-based model on dynamical networks, identified modes of symmetry breaking in topological phases, and characterized the stochastic dynamics for reaching equilibrium
- Demonstrated that agent heterogeneity mitigates opinion polarization in adaptive networks, with low-openness agents prolonging communication time but enhancing consensus strength
- Granted and awarded by NSTC, Taiwan

Undergraduate Researcher & Assistant - Professor Ting-Wen Lan

09/2021 – 02/2024

Graduate Institute of Astrophysics, NTU

- Led the project *Mapping the 3D gas distribution of the Milky Way* [On Hold]
- Curated large sky surveyed stellar catalogs and conducted high-dimensional statistical learning for identifying and estimating gas signals in over 10^6 spectroscopic data
- Assisted in laboratory server maintenance and administration (until December 2022)

PUBLICATIONS

1. Wei-An Chen, Chuan-Jui Li, You-Hua Chu, Shutaro Ueda, Kuo-Song Wang, Sheng-Yuan Liu, and **Bo-An Chen** (2023) “New Insights on 30 Dor B Revealed by High-Quality Multi-wavelength Observations”. *The Astronomical Journal*, **166**(5), 204.

WORKING PAPER

1. **Bo-An Chen** and Hsuan-Wei Lee “Opinion Dynamics on Adaptive Networks with Heterogeneous Openness” [Forthcoming]
2. **Bo-An Chen** “Pilot Survey: The egalitarian ideology of labor movements in Japan-colonizing Taiwan (1898-1932)” [Draft in Mandarin]

PRESENTATIONS

- **Taipei Astronomy Workshop** [Speaker]
Mapping the 3D Gas Distribution of the Milky Way 01/2024
- **2023 Annual Meeting, The Astronomical Society of Taiwan (R.O.C.)** [Poster Presentation]
Mapping the 3D Gas Distribution of the Milky Way 05/2023
- **Student Seminar, Academia Sinica Institute of Astronomy and Astrophysics (ASIAA)** [Speaker]
Are the Missing Baryons on Halo Scales Residing in Warm-Hot-Phase CGM? (with Yi-Shing Tsang) 05/2022
- **Statistics Workshop, NTU High Energy Physics Group (HEP)** [Speaker]
Maximum Likelihood Methods for Signal Estimation in Experimental Particle Physics 03/2022

TEACHING EXPERIENCE

- **Trade Theory** (Ziho Park): EMI teaching assistant at NTU Fall 2023

OUTREACH

- **Guest Lecturer, EMI Teaching Workshop**, National Taiwan University of Science and Technology Fall 2024
- **Co-organizer and Moderator, ASIAA Student Seminar Series**, Academia Sinica Spring 2022
- **Member, Student Committee of Gender Equality**, NTU Fall 2021
- **Voluntary Tutor for Low-Income Household Students**, Department of Physics, NTU Fall 2021
- **Volunteer, International Companions for Learning**, Ministry of Education, Taiwan Fall 2021

SKILLS

- **Computing:** Python, C++, R, STATA, Unix, Git, SQL, MATLAB, Mathematica, Fortran.
- **Languages:** Mandarin (Native), English (Fluent), Japanese (Basic).