

# Minh Ngoc Le

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<https://le-mn.github.io/minhngocle.github.io/>

## RESEARCH INTERESTS

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The dark side: nature of dark matter & dark energy

The bright side: galaxy formation & evolution, stellar globular cluster formation, star formation

## EDUCATION

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2020 - present    **National Tsing-Hua University, Taiwan**

MSc. in Astronomy (expected)

(Ongoing) Thesis: Globular Clusters formed inside Dark Matter Halos

Supervisor: Dr. Andrew Cooper

GPA: 4.15/4.3

2018                **University of Science, Vietnam National University in Ho Chi Minh City**

BSc. in Physics, major: Theoretical Physics

Thesis: Inflation via Higgs-Dilaton potential in Two-Time Physics

Supervisor: Dr. Vo Quoc Phong

## RESEARCH EXPERIENCE

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2023    **LEAPS Internship at Leiden Observatory**

Advisor: Dr. Piyush Sharda, Dr. Mathilde Bouvier, and Prof. Serena Viti

Topic: Quantifying molecular gas turbulence in the low-metallicity Large Magellanic Cloud

2019    **Internship at Academia Sinica Institute of Astronomy and Astrophysics, Taiwan**

Advisor: Dr. Teppei Okumura and Dr. Aniket Agarwal

Topic: Finite volume effect on the velocity correlation statistics

## PRESENTATIONS

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- 2023.05 **Poster: Primordial globular cluster formation models could explain the relation between globular cluster number – dark matter halo mass**  
at the 2023 Scientific Assembly of the Astronomical Society of the Republic of China, Taiwan.
- 2023.02 **Poster: Primordial globular cluster formation models could explain globular cluster number – halo mass relation**  
at IAU 377 Symposium: Early Disk-Galaxy Formation from JWST to the Milky Way, Malaysia.
- 2020.01 **Seminar: Velocity correlation function: discrepancies between simulation and theory prediction**  
at International Center for Interdisciplinary Science and Education (ICISE), Quy Nhon, Vietnam.
- 2019.12 **Lunch talk: Velocity correlation function: discrepancies between simulation and theory prediction**  
at Academia Sinica Institute of Astronomy and Astrophysics, Taiwan.
- 2019.08 **Oral presentation: “Inflation via Higgs-Dilaton potential in Two-Time Physics”**  
at 15<sup>th</sup> Rencontres du Vietnam: Cosmology 2019, ICISE Quy Nhon, Vietnam.
- 2019.02 **Poster: “Inflation Scenarios via Dilaton in Two-Time Physics”**  
at 2019 Asian-Pacific Winter School and Workshop on Gravitation and Cosmology  
Yukawa Institute for Theoretical Physics, Kyoto University, Japan.

## SCHOLARSHIPS

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National Tsing Hua University Outstanding Students Scholarship	school year 2021 - 2022
National Tsing Hua University Outstanding Students Scholarship	school year 2020 - 2021
Vu Dinh Lieu scholarship for students from Tra Vinh province	2016 and 2017
University of Science VNU-HCM Outstanding Scholarship	school year 2015 - 2016
Dong Hanh Association Scholarship	school year 2015 - 2016

## TECHNICAL SKILLS

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<b>Computer Languages</b>	C++, Python, FORTRAN
<b>Software &amp; Tools</b>	Unix/Linux, Mac OS, L <sup>A</sup> T <sub>E</sub> X, MCMC, cluster computing resources
<b>Astrophysical tools</b>	CLASS, Corrfunc, AstroPy
<b>Languages</b>	English (TOEFL iBT 91), Vietnamese (mother-tongue)

## OTHER ACTIVITIES

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- 2020 - 2021    **Volunteer of NTHU Care Life club**  
Taking care of stray dogs in NTHU Campus
- 2019 - 2020    **Part-time STEM teacher at Ephata Summer School and STEMax**  
Engaging & instructing students from 10 - 15 years old to do science experiments
- 2016            **Head of the Organizing Committee, the Racer Hero contest**  
Organizing a contest for undergraduate and high school students: making controlled cars using Arduino
- 2015 - 2016    **Chairperson of NES Academic Club, University of Science VNU - HCM**  
Organizing club discussions on Physics in English