



NGO NGOC HAI

Bachelor Science in Chemistry

I am working at Science Team^{1,2} (ELT/HARMONI) in role research assistant (under guidance of my supervisor - Dr. Dieu Nguyen and Prof. Michele Cappellari) involved in simulation by using Extremely Large Telescope (ELT)/HARMONI observation and kinematics extraction from observatory's data.

Beside that, i am a member in Vietnam Astrophysics Research Network (VARNET³).

PERSONAL DETAILS

<i>Birth</i>	December 03, 1997
<i>Address</i>	Ward 1, District 5, Ho Chi Minh City, Vietnam
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<i>Website</i>	https://hai10hoalk.wixsite.com/my-site

EDUCATION

University of Science, Vietnam National University HCMC
B.Sc in Chemistry

2016-2020

SKILLS

<i>Languages</i>	Vietnamese (mother tongue) English
<i>Programming Languages</i>	PYTHON
<i>Software</i>	ADOBE, MICROSOFT OFFICE, L ^A T _E X

RESEARCH INTERESTS

Intermediate-mass black holes in nuclear star clusters

ELT/HARMONI

Simulating the ELT observation, using high-resolution imaging and spectroscopy and the proximity of our low-mass early-type galaxy sample, I examine in detail their NSCs morphology, composition, kinematics, and dynamical masses to shed a light on their formation origins either gas in situ or stellar migration.

The black holes in dwarf galaxies and the origin of the first black hole seed formation mechanisms

ELT/HARMONI—ALMA

Studying galaxy and massive black hole's evolution by $M_{BH} - \sigma$ correlation. Scaling relations between central black hole mass and host galaxy properties, e.g., the bulge mass component and bulge velocity dispersion of stars, hint to a joint evolution of black holes and galaxies.

¹<https://harmoni-elt.physics.ox.ac.uk/consortium.html>

²<https://hai10hoalk.wixsite.com/my-site/about-1>

³<https://sites.google.com/view/sf2-varnet/team>

Estimating the dynamical mass of black holes and their host galaxies at different redshifts is fundamental to establish their growth scenarios over the cosmic time.

PUBLICATIONS AND SCIENCE CONFERENCES

1. Dieu D. Nguyen, Michele Cappellari, Miguel Pereira-Santaella. *Simulation supermassive black hole mass measurements using ELT/HARMONI Observations. Submitted to MNRAS.*

2. Dieu D. Nguyen, Michele Cappellari, **Hai N. Ngo**, Tinh Q. T. Le, Phong T. On, Tuan N. Le, Huy G. Tong and Miguel Pereira-Santaella. *Searching and measuring intermediate-mass black hole mass with ELT/HARMONI high-spatial-resolution integral-field stellar kinematics in a sample of ≤ 11 Mpc nuclear star clusters. Preparing.*

3. Dieu D. Nguyen, Sabine Thater, **Hai N. Ngo**, Tuan N. Le, Tinh Q.T. Le, Phong T. On. *Hunting Intermediate-mass black holes with ELT. Origin, growth and Feedback of black holes in Dwarf galaxies, Sept 15, Spain.*

REFERENCE

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