

## Ph.D. Thuong Duc HOANG

https://hoangducthuong.github.io/

## PERSONAL DETAILS

Degree Ph.D in physics of the Universe at Paris University

Birth April 12, 1989 Nationality Vietnam

Email thuong.hoang@ipmu.jp

Address Kavli IPMU, The University of Tokyo, 5-1-5 Kashiwanoha, Kashiwa,

Chiba, 277-8583, Japan.

## **EDUCATION & EXPERIENCE**

Postdoc 2021-present

Kavli Institute for the Physics and Mathematics of the Universe (Kavli IPMU), The University of Tokyo - Japan

Develop the Polarization Modulator Unit of the LiteBIRD Low Frequency Telescope (LFT). Advisor: Prof. Tomotake Matsumura

#### Lecturer/researcher

2020 - 2021

University of Science and Technology of Hanoi (USTH)-Vietnam

Teaching modules: Basic programming (C); Data Analysis & Visualization (python); Modern cosmology; Practical work: Advanced electronic system

#### Postdoctoral scholar

2019-2020

Cornell University - United States

Testbed focal plane detectors for the Simons Observatory. Supervisor: Prof. Michael Niemack

## Ph.D. in AstroParticle and Cosmology (APC) laboratory

2015-2018

 $Paris\ University\text{-}France$ 

- Title: Optimization of future projects for the measurement of Cosmic Microwave Background polarization. (Bandpass filters mismatch systematic effect for LiteBird satellite & Interaction of particles with 256 superconducting Transition Edge Sensors array of QUBIC ground-based experiment). Supervisors: Assoc. Prof. Guillaume Patanchon. [dissertation]
- 21-22 December 2017 Paris-France, my initiative: 1st Meeting of Young Vietnamese Community of Astronomy (YVCA), APC, Paris University. Program: https://space.usth.edu.vn/en/news/news-events/yvca-program-127.html

#### Master Space Science & Applications

2012 2014

Double-Diploma: Observatoire de Paris and University of Science and Technology of Hanoi (USTH).

• 3/2014 - 9/2014: Master thesis: Cosmic ray interaction with Planck satellite detectors for the measurement of the Cosmic Microwave Background (CMB) radiation polarization with Dr. Guillaume Patanchon at the APC laboratory.

#### Electrical Engineering

2007-2012

Hanoi University of Science and Technology (HUST), School of electrical engineering. Diploma: Degree of Engineer in Control and Automation Engineering.

• 2011 - 2012: Lab work: ABB - HUST training center (teamleader). ABB is a global group in power and automation technologies.

## High School: Hai Phong-Vietnam

2004-2007

The top pupil in math, physic and chemistry.

## **LANGUAGE**

• English: Fluent

• French: Intermediate

• Japanese: Beginner

• Vietnamese: Native

# SKILLS [SIMULATION, INSTRUMENTATION & DATA ANALYSIS]

- Simulation of physical processes/ Data analysis.
- Electronic and mechanical experiences.
- Python (Advanced), C/C++ (intermediate), Bash shell (Basic), Matlab (Intermediate), Labview (intermediate).
- TOAST (Time Ordered Astrophysics Scalable Tools) (intermediate), Root (Basic).
- Solidwork (Advanced), Catia v5/ v6 (Intermediate), AutoCAD (Intermediate).
- ANSYS (Basic)
- OrCAD/Altium Designer (Intermediate), Layout Editor / Klayout (Basic).
- Window/Linux/Mac OS (Advanced), Microsoft Office/Open Office/Keynote (Advanced).
- Latex (Advanced).
- Adobe Photoshop/Lightroom/Premiere (Intermediate).
- WordPress/HTML/CSS (Intermediate).
- Photography (Intermediate), guitar player (Intermediate).
- Ping-pong/badminton (Intermediate).
- Astronomy facebook fan page ( $\approx 12000$  likers): https://www.facebook.com/thienvanhoc.org/
- Google Scholar: https://scholar.google.com/citations?hl=en&user=X6\_u9x0AAAAJ&view\_op=list\_works&sortby=pubdate