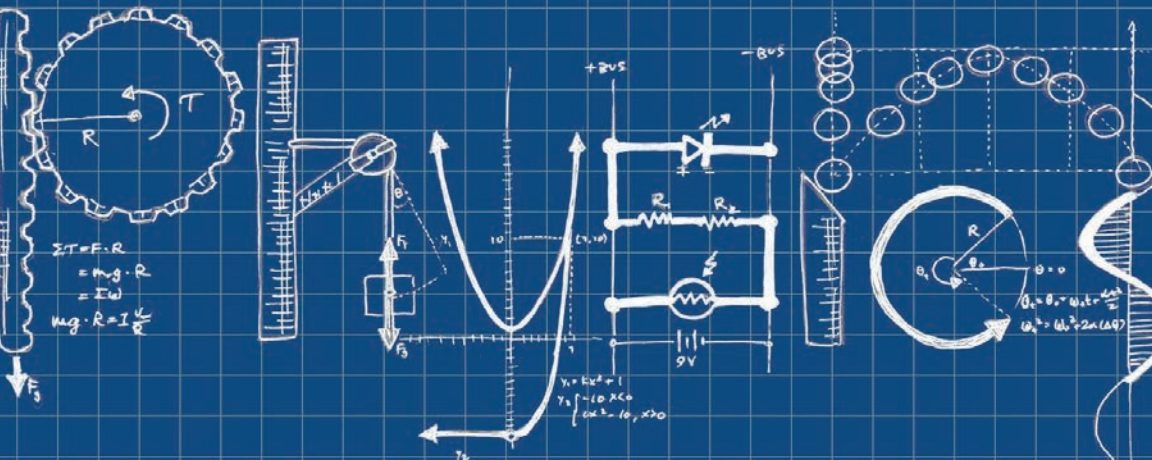


DOCTOR OF PHILOSOPHY PROGRAM IN THEORETICAL PHYSICS

■ THE INSTITUTE FOR FUNDAMENTAL STUDY

DOCTOR OF PHILOSOPHY PROGRAM IN THEORETICAL PHYSICS

This program serves as an entrance into in-depth comprehension of the amazing world of physics, ranging from the unimaginably small scales of elementary particles to the vast dimensions of our universe. The focus of the program is the structure of Physics, conceptualized holistically so as to produce highly qualified academic leaders of the field.



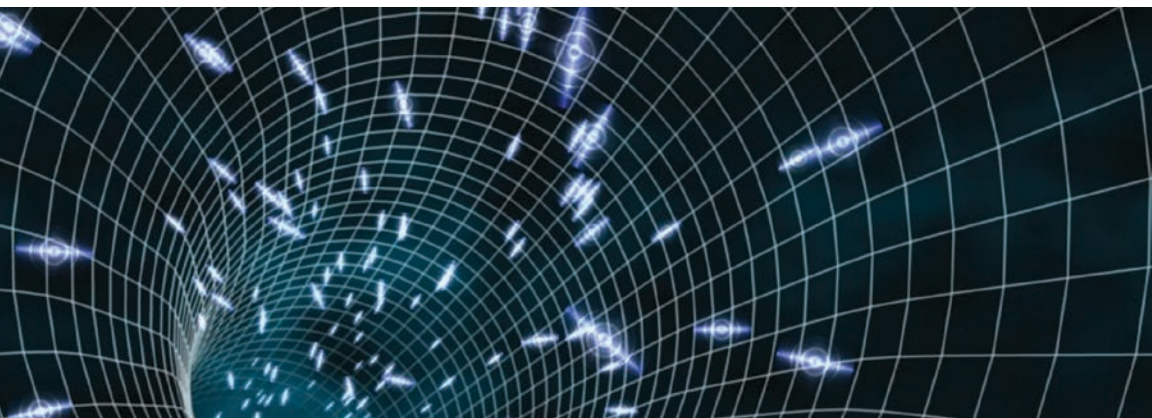
Objectives

Targeted outcomes in graduates are as follows:

- In-depth knowledge in Structural Physics-the core element of Theoretical Physics.
- Best trained to teach core courses in Physics at Master's and Doctoral levels within the world context.
- High potentiality in conducting world-class research in Theoretical Physics.
- World-class leadership in Theoretical Physics.
- Integrated fundamental thinkers, capable of simulating models of Physics with other disciplines such as Social Sciences, Organizational Studies, Communications and various Natural Systems.
- Holistically able to conceptualize the uniqueness and beauty of Physics.
- Consciously moral in striving for the betterment of the communities of scholars and the world community.

Admission

In accordance with the Graduate School Rules and Regulations. The program committee reserves the rights to require more qualifications as deemed appropriate.



Medium of Instruction

Thai and English

Research Focus

- Theoretical Cosmology
 - Modified Gravities
 - Dark Energy Dynamics
 - String Cosmology
 - Inflation
 - Cosmic Microwave Background
 - Large Scale Structure of the Universe
- Quantum Field Theory and High Energy Physics
 - String Theory
 - Gauge Theory
 - Modern Aspects of Quantum Field Theory
 - Renormalization Theory
 - Quantum Gravity
- Mathematical Physics
 - Stability of Matter and Related Problems
 - Fundamental Aspects of Quantum Physics

Requirement for Graduation

In addition to Graduate School requirements, upon final oral dissertation defense, two articles as parts of the dissertation findings are to be eventually published in peer-reviewed journals with an impact factor of at least 0.5. One should already be selected for publication and the other in the submission process. The latter is considered a partial fulfillment of the dissertation notwithstanding its future publication.