

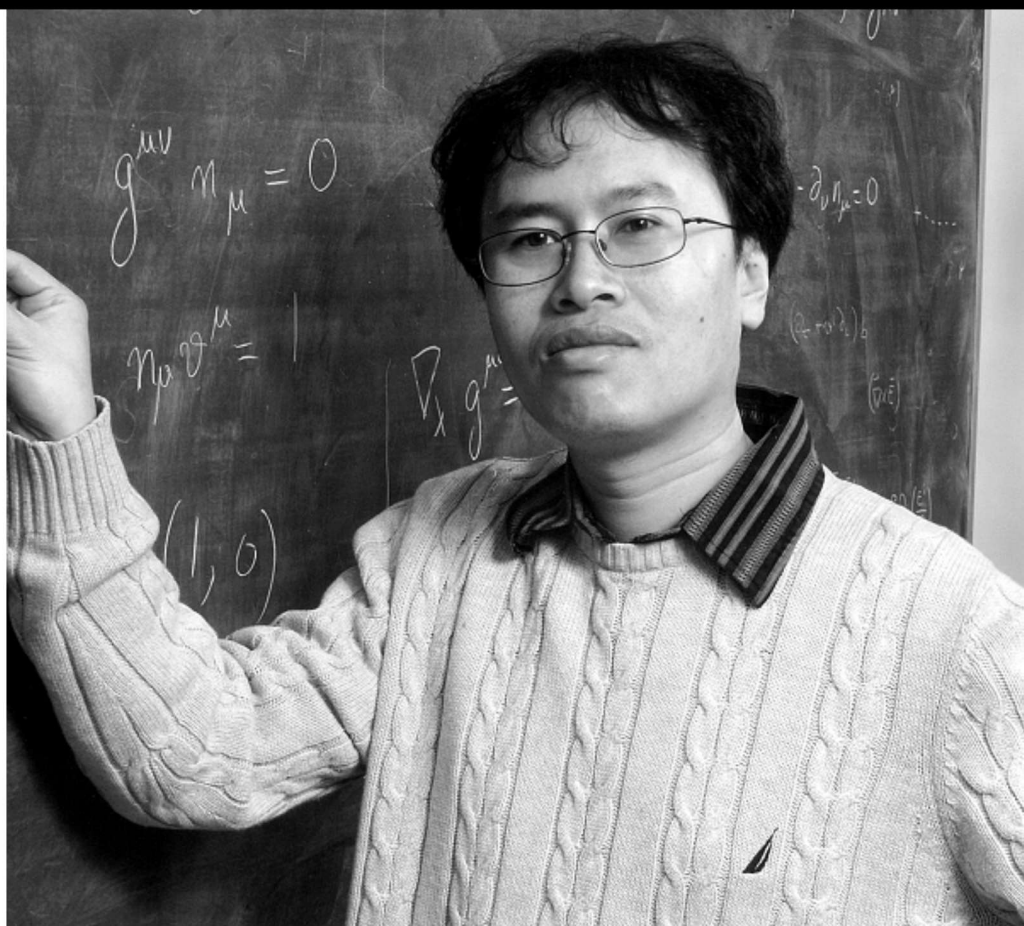
## Public Lecture

# “Quantum Field Theory: a Universal Language”

## Lecturer

**Prof. Dam Thanh Son**

Director, University Professor  
Kadanoff Center for Theoretical Physics  
The University of Chicago



**2024 9/27**

**Aoba Science Hall at Tohoku University**

**Friday 13:30 - 15:00 (JST)**

**Aobayama Campus**

Quantum field theory was originally invented as a theory of elementary particles and their interactions. Unifying quantum mechanics and special relativity, it provides the most accurate description of nature at the smallest scales. It was soon discovered that quantum field theory also provides a powerful language to describe phenomena occurring in condensed matter. I will describe how quantum field theory is used in different subfields of physics, focusing on a few common ideas: symmetry breaking, renormalization group, and duality.