## Παρουσίαση Πτυχιακής Εργασίας στο Εργαστήριο Θεωρητικής Φυσικής

## Τρίτη 8 Ιουλίου 2025

Αίθουσα Σεμιναρίων Εργαστηρίου Θεωρητικής Φυσικής,  $4^{o\varsigma}$  όροφος ΣΘΕ

 $10:00 - 11:00 \pi \mu$ 

## Σάββας Αβραμίδης

"Spontaneous Symmetry Breaking & Higgs Mechanism"

## Περίληψη:

In the 1950s, physicists, encouraged by the successes of Quantum Electrodynamics, did not hesitate to propose a gauge theory for the weak interactions. This theory predicted that, just like the photon, the carriers of the weak force would also be massless. However, this was in contradiction with experimental data, as there was strong evidence for massive bosons. In this talk, we will discuss the Higgs mechanism, which through spontaneous symmetry breaking, will emerge as the key to constructing a consistent theory that provides mass to the \$W^\pm\$ and \$Z\$ bosons.

Επιβλέποντες: Αναστάσιος Χρ. Πέτκου (Καθηγητής) Κωνσταντίνος Σιάμπος (Επίκ. Καθηγητής)

Η παρουσίαση θα μεταδοθεί και διαδικτυακά στον παρακάτω σύνδεσμο: <a href="https://authgr.zoom.us/j/95217843826?pwd=fbbadiZ0j9RlmBTpP3PaBTTMS710xb.1">https://authgr.zoom.us/j/95217843826?pwd=fbbadiZ0j9RlmBTpP3PaBTTMS710xb.1</a>

Meeting ID: 952 1784 3826

Passcode: 996505