Particle Physics II
PHYS 581.006

Spring 2022
Tuesday / Thursday
11 am — 12:15 pm

PAIS 3205

What is our world made of? How do the smallest constituents of Nature interact? You are invited to the wonderland of particle physics and have a glimpse of how the quantum theory works on the smallest scales.

Prerequisites: A good understanding of quantum mechanics (PHYS 521) and electromagnetism (PHYS 405/406) and a solid grasp of mathematics (PHYS 466).
Particle Physics I (PHYS 542) is NOT required.

Contents: Relativistic wave equations, second quantization, introduction to quantum electrodynamics (QED) and quantum chromodynamics (QCD), electroweak theory, standard model (SM) of particle physics and beyond.

Instructors: Dr. Huaiyu Duan (first half) and Dr. Rouzbeh Allahverdi (second half)