

Title of the course: Particle Physics for Chemists

Credits: 2

Coordinator: Süvegh, Károly

Department: Department of Analytical Chemistry

Prerequisites: basic knowledge in nuclear physics/nuclear chemistry and quantum mechanics

Topics covered by the course:

conservation laws, symmetries, basic forces, properties of force fields, quasi-particles, instruments of particle physics, data bases, virtual particles, bosons, Feynmann graphs, quarks and particles, colors of particles, particles and the Universe

Literature*:

Suggested books:

Harald Fritzsch: Quarks, *Penguin Books*, London, 1992

<http://particleadventure.org/index.html>

Martinus J G Veltman: Facts and Mysteries in Elementary Particle Physics, World Scientific, London, 2004