

Quark and Lepton Flavor Physics (SoSe 2021)

Time: Tuesdays, 14:15 – 16:00

Zoom link:

<https://zoom.us/j/93339268226?pwd=b2tTL0E4c3JiUjY3cENmSDkzS1NIZz09>

Lecturer: Ulrich Uwer

uwer@physi.uni-heidelberg.de

Easy online examen (Leistungsnachweis) at the end of the semester. Only necessary if you need the ECTS points (4).

Lecture webpage:

<https://uebungen.physik.uni-heidelberg.de/vorlesung/20211/1346>

Content

I: Flavor in the Standard Model

II. Quark sector

- Experimental foundations
- K-Meson
- Meson Mixing
- CP violation
- FCNC – rare meson decays

III. Lepton sector

- Experimental foundations
- Neutrino mass measurements
- Neutrino mixing
- Majorana neutrinos
- g-2 measurements
- EDM measurements
- Lepton flavor violation