

Advanced quantum mechanics and quantum field theory, Frühjahrssemester 2021

Organization

Lectures: Mo. and Tue., 8:15 - 10 Uhr, online via zoom. Lectures will start on 01.03.2021.

Exercise classes: Fr., 13:15 - 15 Uhr, online via zoom. First exercise class on 05.03.2021!

Suggested procedure for credit points and grading (to be confirmed in the first lecture):

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To obtain the **6 Kreditpunkte**, you have to reach 50% of the points in the homework problems AS WELL AS 50% of the points in the written test at the end of the semester. The grade of the written test will be the total grade of the course.

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Tutors:

Dr. Michal Kloc Zi.: 4.10; michal.kloc@unibas.ch

Frank Schäfer Zi.: 4.13; frank.schaefer@unibas.ch

Dr. Ryan Tan Zi.: 4.10; ryanguangting.tan@unibas.ch

Dr. Gaomin Tang Zi.: 4.13; gaomin.tang@unibas.ch

Exercise sheets are available on the [Advanced quantum mechanics homepage](#).

**Literature:**

**T. Lancaster and S.J. Blundell:** *Quantum Field Theory for the Gifted Amateur*  
available electronically in the UB and as **NA 278** in the Physics Library

Background reading:

**A. Zee:** *Quantum Field Theory in a Nutshell* **NA 195**  
the big picture

**M.E. Peskin and D.V. Schroeder:** *An introduction to Quantum Field Theory* **NA 243**  
advanced and rather technical, particle physics

**M. Srednicki:** *Quantum field theory* **NA 278**  
sometimes interesting for an alternative point of view

There are books on QFT for every taste, please check “Further reading” on p. 467 ff in Lancaster/Blundell.