

Information Experimental Physics Va (Atomic and Molecular Physics), Winter term 21/22

Preface

The organization of the course "Experimental Physics Va" (registration, notifications, allocation of exercise groups, distribution of tasks, chat for questions, etc) is handled completely via the online platform MS Teams - details can be found below.

Lecture Experimental Physics Va

We currently (Sep 17) plan for an in-person lecture given the COVID regulations allow for it.

In addition to attendance in the lecture hall, online participation is also made possible via the MS Teams conference system (live stream from the lecture hall). In addition, recordings of the lectures are made available (unedited) after the respective lecture date so that they can be accessed and viewed at any time. Questions about the lecture can be asked either during the event or in the online chat on the MS Teams platform; we will provide answers in a timely manner; however, students are of course also welcome to contribute to the discussion.

Content: atomic- und molecular physics (hydrogen atom, one-electron-systems, atoms in magnetic and electric fields, interaction of atoms with light, atoms with many electrons, molecules: structure – binding - spectra).

Exercises for Experimental Physics Va

Exercises are set for each week of the lecture and are made available online in the form of a PDF document on Mondays of each week. The exercises refer to the material of the lecture Experimental Physics Va.

The time for working out the exercises is one week, the solutions are submitted in writing online in MS Teams (scan or photo is sufficient, combine all pages in a PDF file). If possible, the solutions should be submitted in groups of two within an exercise group. The solutions should be comprehensible and presented in a clean and legible form. The solutions will be discussed weekly in the exercises - for this purpose, the exercise group leaders will select groups of students who will present their solutions before the exercise. By submitting a solution, you confirm that each member of your submission group is able to present the solution path in the exercise.

This semester there will probably be two different exercise groups, which will be held on different dates. You will be assigned to one of these groups according to the priorities you indicated in the registration for the MS Team "EP Va: Atom-/Molekülphysik - Physics of Atoms/Molecules". Exercise group instructors are available to answer questions via chat through MS Teams during normal working hours. Questions received late in the evening or on weekends will not be answered until the next business day.

Regular participation in the exercises is a prerequisite for admission to the module examination!

To obtain admission to the examination, you must...

- achieve at least 2/3 of the total score for the exercise tasks.
- actively participate in the exercises (presenting an exercise task at least three times).

- be absent from the exercise no more than once without excuse. If you are unable to attend a tutorial, please notify your tutorial group leader in advance by mail/MS Teams. If there are valid reasons, such as illness, the absence will be excused

For participants from higher semesters: A previously acquired admission is proven by an already taken examination or by a certificate of the corresponding chair.

Publication of the first exercise sheet: 18.10.2021.

Start of exercises: 25.10.2021.

Technical Implementation

As a platform for providing material for the lecture we have chosen Microsoft Teams, for which UdS has a campus-wide license. In addition to sharing lecture and exercise materials, we will also use Teams to share relevant organizational information about the lecture and to clarify any questions you may have. Basic descriptions of Teams and links to download the software for both desktop and mobile versions can be found at (mostly in German):

<https://www.uni-saarland.de/projekt/digitalisierung/digitalisierungsprojekte/digitalelehre/microsoft-teams-fuer-studierende.html>

In the following, we provide brief descriptions of how to use MS Teams for the lecture. After a few introductory notes on how to register for the lecture, we will guide you step-by-step through the structuring of the "Experimental Physics" team. The descriptions refer to the desktop version of Teams.

Registration for the lecture

You have to register for the lecture and the exercises:

Via MS Teams platform:

You find the link on the LSF page and on our webpage

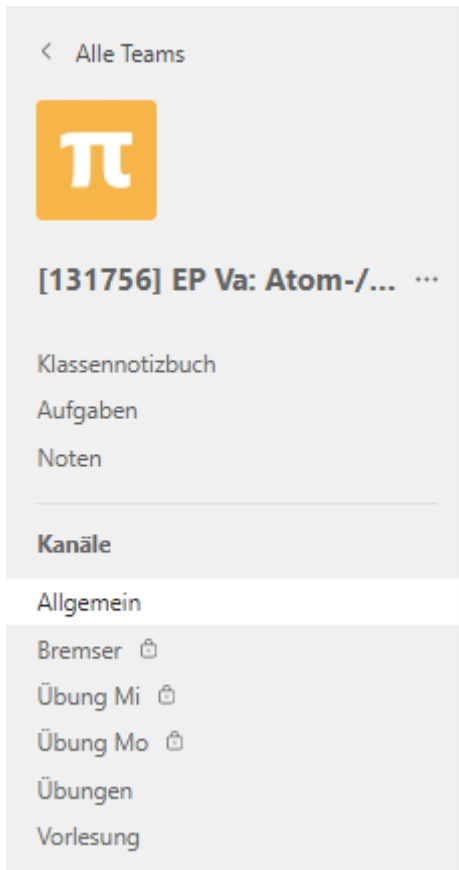
<https://www.uni-saarland.de/lehrstuhl/becher.html>

see "Lehre > Veranstaltungen im Wintersemester 2021/22 > Experimental Physics Va". Upon registration we ask for some basic information such as your name, your study course and semester, student identification number and your user identification (UdS Kennung).

As soon as you have registered, you will receive an email from us with an invitation to join the "Modern Optics" team in MS Teams (note: since we send the invitations "by hand", it may take a little while until you receive them).

If you follow the link "Open Microsoft Teams" in the mail, Teams will open (you may need to install Teams and confirm that it should open). To log in to Teams, use your UdS user ID including the domain (e.g. s9mamust@uni-saarland.de, ATTENTION: NOT @stud.uni-saarland.de) and the corresponding password.

On MS Teams you will see an overview of the teams you belong to. If you click on "[131756] EP Va: Atom-/Molekülphysik - Physics of Atoms/Molecules" you will get to the team of the lecture. The lecture is divided into different channels, which you can see on the left side of the screen (see figure).



We recommend to activate the channel notifications (right-click on the channel → channel notifications → All)

Channel „General/Allgemein“:

When you switch to the "General" channel, you will see a number of headings at the top of the screen.



In the section "Contributions/Beiträge" we will share with you everything organizational. Files shared in this channel can be found again in the "Files" section.

Channel „Tasks/Aufgaben“:

In the "Tasks" channel you will find all available exercise sheets. These are further divided into the categories "assigned" (exercise sheets to be worked on) and "completed" (exercise sheets already handed in). If you click on one of the exercise sheets, a new page opens with information about the respective exercise sheet. Here you can see work instructions, the due date and the number of possible points. Under "Reference Materials" (red box 1) you can download the exercise sheet in pdf format. If you want to submit your solution, you can do so under "Add Work" (red box 2). If possible, multiple pages/images/scans should be combined into one pdf file. Finally, click on "Submit" (red box

3). Important: If you have uploaded solutions but do not press "Submit", we cannot recognize that you have submitted solutions.

← Zurück Abgeben

1. Übungsblatt Punkte
3 Punkte möglich

Fällig am 14. Mai 2020 08:00 • Schließt am 14. Mai 2020 08:00

Anweisungen

- Bearbeiten Sie die Aufgaben und verschriftlichen Sie die Lösungen übersichtlich
- Laden Sie spätestens zum Fälligkeitsdatum Ihre Lösung in Teams hoch

Referenzmaterialien

uebung01.pdf ... **1**

Meine Arbeit

A2.pdf ...

+ Arbeit hinzufügen **2**

Finally, under the "Grades/Noten" tab, you will see a list of all the exercise sheets, whether you have already handed them in, and with how many points they were graded.

Channel „Lecture/Vorlesung“:

In this channel the course materials are provided, i.e. the lecture notes and the lecture recordings. You can find them under the tab "Online material". This page clearly links all course materials so that you can always follow the current status of the lecture here. Lecture videos are also linked here. ATTENTION: Because Teams seems to update permissions slowly, in our tests it could take up to 2 days until participants could watch videos. Before that, you were referred to your restricted permissions.

π Vorlesung Beiträge Dateien Online-Material Notizen +

☰

Online Material zur Vorlesung
Zuletzt bearbeitet: Gerade eben

Organisatorisches

Under the tab "Contributions/Beiträge" you and all other students can ask questions about the lecture. When doing so, you should make sure to provide as accurate a reference as possible. We will make every effort to answer questions in a timely manner. The "Files/Dateien" section is where course materials will be uploaded. The "Notes" section is not used within this channel.

Channel „Exercises/Übungen“:

π Übungen Beiträge Dateien Notizen +

Here the exercise sheets will be uploaded weekly (Mondays 12 o'clock) under the tab "Files". In addition, general questions about the exercise sheets should be clarified under the tab "Posts". The posts will be moderated here so that only the supervisors can create a new post. The posts will follow the "1st exercise sheet" pattern. Students can ask questions by replying to the respective posts. All other sections in this channel are not of interest and can be ignored.

Channel „Exercise Group Mo/Mi“:

This semester there will likely be two different exercise groups, which will be held on different dates. Students will be assigned to these groups if there are enough participants according to the priorities you indicated in the registration for the MS Teams Team "EP Va: Atom-/Molekülphysik - Physics of Atoms/Molecules". In MS Teams, your exercise group leader will invite you to join the channel of the corresponding exercise group. Once you are a member of this channel, you will have the opportunity to ask questions to your exercise group leader or to the other members of your exercise group under the heading "Contributions". Please note: Questions of general interest regarding the exercises, whether regarding content or organization, should be asked in the channel "Exercises" (see previous section) so that all students receive this information.

Contact

Lecturer:

Prof. Dr. Christoph Becher, Fachrichtung Physik, Geb. E2.6, Raum 2.02; Tel. 2466; E-mail: christoph.becher@physik.uni-saarland.de

Tutors:

Dennis Herrmann: dennis.herrmann@uni-saarland.de

Anna Fuchs: a.fuchs@physik.uni-saarland.de